

## United States: Financial Services

### Mortgage Fallout Has More to Go - Position Defensively

#### 5 Big Implications

The GS Financials team has completed a deep dive on the credit crunch and concluded that the 4% drop in home prices is the tip of the iceberg for a financial system that is not built to support declines which still have another 13-14% to go.

**1) Write-downs and losses will continue to mount.** This will fuel negative investor sentiment and keep valuations under pressure.

**2) Capital raising for some, preservation for others.** Some MIs and Fin'l Guarantors will need to raise capital. Weaker banks may cut dividends.

**3) Business models permanently impaired.** Without high margin subprime/Alt-A revenue streams, normalized returns for mortgage lenders could fall by 40%; we anticipate some investment banks will exit the mortgage business altogether.

**4) Broader consumer credit deterioration as falling home prices have put 1/3 of the US in or near recession.** Consumer losses will rise.

**5) A consolidation wave, but not yet.** M&A will increase when buyers see a bottom.

#### Sell Ideas: Citigroup & Discover to Sell

We expect deep value investors to step up to some of these names, even in the midst of continued downward pressure, and look for companies that the market has excessively beaten up. That said, we also expect several false bottoms before the real one develops. **We have downgraded Citigroup to Sell.** Further CDO marks will arise and there will be broader fallouts in its various business segments. **We have downgraded Discover to Sell.** Consumer credit deterioration will drive estimates lower and negatively impact valuation. We recommend a pair trade between American Express (Buy) and Discover (Sell), as well as between Lehman (Neutral) and Citigroup (Sell).

#### Buy ideas: 3 "Babies with the Bathwater"

We see three ideas that are "babies thrown out with the bathwater" in the credit crisis and we would be buyers today of AIG, US Bancorp, and aircraft lessors. In addition, we recommend a pair trade between US Bancorp (Buy) and First Horizon (Sell).

#### RATINGS CHANGES:

Downgrading Citigroup from Neutral to Sell  
Downgrading Discover from Neutral to Sell

#### STOCK IDEAS:

Investment Ideas			
<b>3 Buy Ideas - "Babies with the Bathwater"</b>			
Buy:	AIG	USB	Aircraft Lessors
<b>2 Sell Ideas</b>			
Sell:	C	DFS	
<b>3 Pair Trades</b>			
Long:	AXP	LEH	USB
Short:	DFS	C	FHN

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*The prices in the body of this report are based on the market close of November 16, 2007.*

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## Overview: Mortgage is in Crisis and We Haven't Seen the Worst

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The GS Financial Services team has completed a deep dive on the credit crunch and concluded that the 4% drop in home prices to date is the tip of the iceberg for a financial system that is not built to support declines which still have another 13-14% to go. We see 5 important implications:

- 1) **Write-downs and losses will continue to mount fueling negative investor sentiment and keeping valuations under pressure.** This is true for some Brokers, Mortgage Insurers, and Financials Guarantors. Weaker brokers will lose business due to a reduced ability to take risk. Other companies will have disappointing earnings and book value erosion. Finally, some will simply go out of business.
- 2) **Some companies will have to raise capital, others will have to preserve capital, and managements will need to repair some seriously damaged balance sheets.** The Financial Guarantors and Mortgage Insurers in addition to Citigroup will likely need to raise capital. Companies likely to be in a capital preservation mode include: Washington Mutual, National City and First Horizon.
- 3) **Some business models are permanently impaired.** With a significantly smaller non-conforming mortgage market, mortgage originations will be smaller and less profitable. Fixed income markets that supported the subprime bubble (MBS, structured finance) are impaired. The risk of prescriptive legislation eroding mortgage lending profitability is high.
- 4) **Broader consumer credit deterioration will emerge.** Falling home prices have put 1/3 of the US economy into or near recession. Consumer losses will rise.
- 5) **We expect a substantial wave of consolidation arising out of this crisis.** Although buyers will need a clear line of sight that stabilization in the housing mess is forthcoming (possibly in 2009), M&A activity will be high.

**Our bottom line for Financial stocks:** Though some deep value investors may step up to some of these names even in the midst of continued downward pressure looking for companies that the market has excessively beaten up, we also expect several false bottoms in Financials before the real one develops as there is still substantial housing deterioration to emerge. **We have downgraded Citigroup to Sell.** Further CDO marks will arise and there will be broader fallouts in its various business segments. **We have downgraded Discover to Sell.** Consumer credit deterioration will drive estimates lower and negatively impact valuation. We recommend a pair trade between Amex (Buy) and Discover (Sell). Amex is less exposed to consumer losses and has a better network.

Conversely, we see three ideas that are “babies thrown out with the bathwater” in the credit mess and **we would be buyers today of AIG, US Bancorp and aircraft lessors.**

We have segmented our findings into two parts:

- First, we expand on our key thoughts and conclusions.
- Second we detail the “problem in pictures,” identifying the root cause of the mortgage crisis and analyze each of our 5 key implications in depth.

## Investment Ideas

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We have downgraded two stocks to Sell:

- **We have added Citigroup (C) to the Americas Sell List.** The deterioration in the global credit markets will likely create an increasingly challenging operating environment for all players, but especially those with large exposure to mortgage and consumer credit issues. Given the firm's exposure to CDOs, subprime mortgages, SIVs and leveraged loans, it will be challenging for the company to achieve its desired capital ratio targets. We would not be surprised to see Citigroup raise equity, cut its dividend, or sell assets. We recently reduced our 4Q2007 and 2007 estimates to incorporate the firm's updated guidance; however, we are lowering our 2008 and 2009 estimates to \$3.80 and \$4.60 from \$4.65 and \$5.20. We are lowering our 12-month price target to \$33 from \$40.
- **We have added Discover (DFS) to the Americas Sell List:** Given the anticipated effect of falling house prices on consumer credit trends, we believe that management's charge-off guidance is too low. We recently lowered EPS estimates by 29% in 2008 and 46% in 2009, due to higher credit cost assumptions. Our SOTP-derived 12-month price target (\$16) assumes a 40-60 split between network and lending businesses trading at 17.0X and 8.5X 2008E earnings, respectively, and implies 10% downside.

We recommend three stocks which we view as "babies thrown out with the bathwater":

- **AIG (Buy):** We reiterate our buy rating on AIG. In our view, AIG's recent market cap decline (\$34 billion since 10/09/07) significantly overstates the potential subprime related write-downs that the company may face. We note that AIG avoided writing protection on what is turning out to be the worst vintages (2006 and 2007) related to subprime exposures. In addition, the total 2006 and 2007 subprime exposed RMBS investments held on AIG's balance sheet is only \$26 billion, of which 98% is rated AAA and AA. Given the decline in market value, the market has more than written this entire portfolio to zero. Finally, AIG's level of disclosure dwarfs that of other financial institutions, which when combined with the incremental \$8 billion buyback program, suggests that the company believes that its mortgage exposure is very manageable.
- **US Bancorp (USB, Buy):** We view US Bank as highly defensive given its significant unallocated reserve of over \$600 million preventing the need to build reserves through the cycle, coupled with the fact that the company's credit risk profile is fairly low given tightened underwriting standards implemented after the 2001 recession. The company, moreover, has a highly diversified earnings mix away from credit with an estimated 40% of earnings from payments and asset management activities.
- **Buy aircraft lessors:** Shares of aircraft leasing companies (AerCap, Airastle, Genesis Lease) have fallen 30% since last summer, on funding concerns that we do not believe to be real; we estimate that current liquidity can support continued growth into at least 2H2008 in a supportive industry environment. Despite relatively limited credit exposure for the aircraft lessors, share price performance has not been distinguished relative to all other names within our coverage universe of Mortgage and Specialty Finance.

We recommend three pair trades for investors focused on relative value:

- **Long Lehman / Short Citigroup:** Lehman Brothers has done a solid job over the past few years diversifying its business away from a predominant U.S. focus on fixed income to a global, multi-product platform. Lehman has moved aggressively into global M&A, equities, and other fixed income classes products, and now has over 50% of revenues generated

internationally. Citigroup is also extremely diversified, but has significant presences in areas that are under pressure in the near-term (mortgages, CDOs) and longer term (consumer risk). Lehman is likely to outperform Citigroup near term, in our view, as we envision lower mark-to-market losses and much lower impact from deteriorating consumer credit.

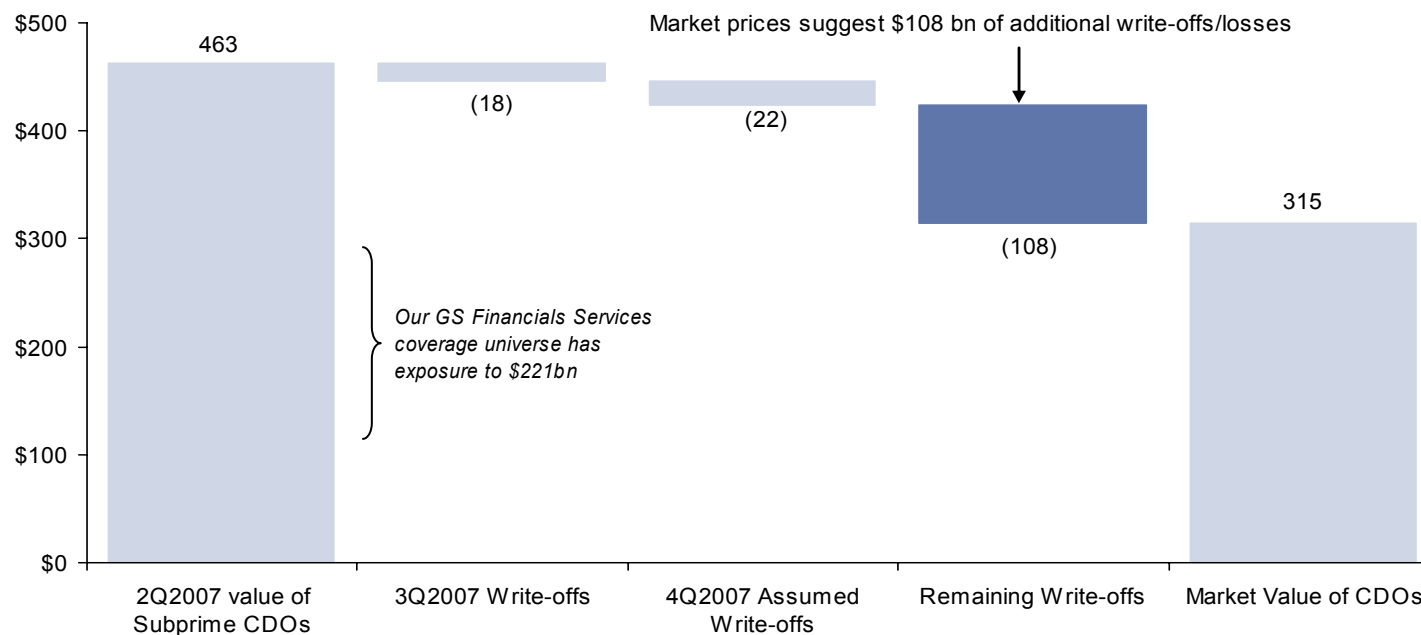
- **Long American Express / Short Discover:** Discover is more exposed to domestic consumer credit trends than American Express; we estimate 60% of Discover's group value is derived from consumer lending, versus 20% at American Express. American Express has more exposure to international businesses, and thus more upside from better growth prospects, less credit concerns, and stronger currency values offered outside the U.S. We believe that American Express leverages its "closed-loop" credit card network via the Membership Rewards Program to drive card spending in a way that Discover cannot; therefore, we assign a higher target multiple to the 60% of American Express group value that is related to the network, versus the 40% at Discover.
- **Long US Bancorp / Short First Horizon:** We would pair US Bank against First Horizon. We view US Bank as highly defensive. First Horizon, conversely, is in a significant reserve building mode given its sizable exposure to residential construction activities and home equities at 44% of the loan portfolio versus a much lower 19% for peers.

## Implication 1: Write-downs and losses will continue to mount

**Write-offs and losses from the current housing slump will be larger than the market is currently discounting. Declining home prices and a worsening economic landscape will continue to drive further deterioration in RMBS valuations, having a particularly profound impact on RMBS CDOs. We would be sellers of Citigroup and avoid mortgage insurers and the financial guarantors as these firms are most likely to be negatively impacted.**

- We estimate that industry-wide losses from declines in the market value of subprime mortgage related CDOs is almost \$150 billion. Write-offs in 3Q2007 totaled \$18 billion from financial firms globally while recent preannouncements from some firms indicate that another \$22 billion will occur in 4Q2007, suggesting that there is \$108 billion of unaccounted for mark to market losses coming.

**Exhibit 1: Market prices of CDOs suggest an additional \$108 billion of write-offs/losses exist**  
\$ billions, assumes that roughly 50% of structured finance CDOs were mortgage related



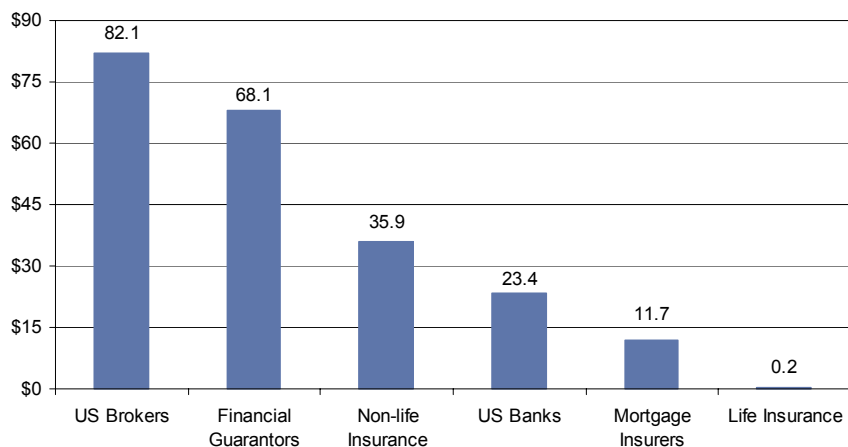
Source: Asset Backed Alert, Company reports, Goldman Sachs Research estimates.

**Subprime mortgage CDO exposure across our GS Financial Services Research team is about \$221 billion based on most recent disclosures. With some off-balance sheet arrangements at our firms, these exposures could move even higher over**

**the next few quarters. Among US Financials which we cover, exposure is most concentrated with the brokers and financial guarantors. These sectors have exposure to \$82 billion and \$68 billion of subprime CDOs, respectively.**

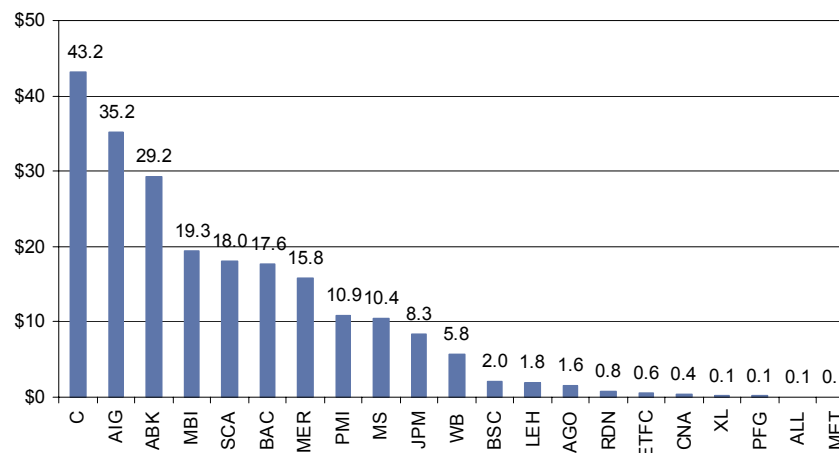
- We prefer insurers, asset managers and market structure stocks given their relatively minimal exposure to subprime mortgage CDOs.
- We remain Neutral on the mortgage insurers. We base our view on the premise that: a) MGIC does not have any CDO exposure, b) PMI's liability is limited to its initial investment in FGIC (which now accounts for up to \$7 in book value per share), and c) Radian, while heavily exposed to CDOs, is much less exposed to the most problematic CDO categories.
- We remain Neutral on the brokerage sector. We believe there will be negative news flow coming out of the large-cap brokers over the next couple of quarters as firms continue to write-down their CDO and subprime mortgage exposure. We would avoid those firms with significant credit risk and we continue to recommend firms that have less balance sheet risk such as Lazard and TD Ameritrade.

**Exhibit 2: Subprime mortgage CDO exposure by financial services sector**  
\$ billions



Source: Company data, Goldman Sachs Research estimates. Note: JPMorgan and Citigroup are included in the Brokers.

**Exhibit 3: Company specific subprime mortgage CDO exposure**  
\$ billions

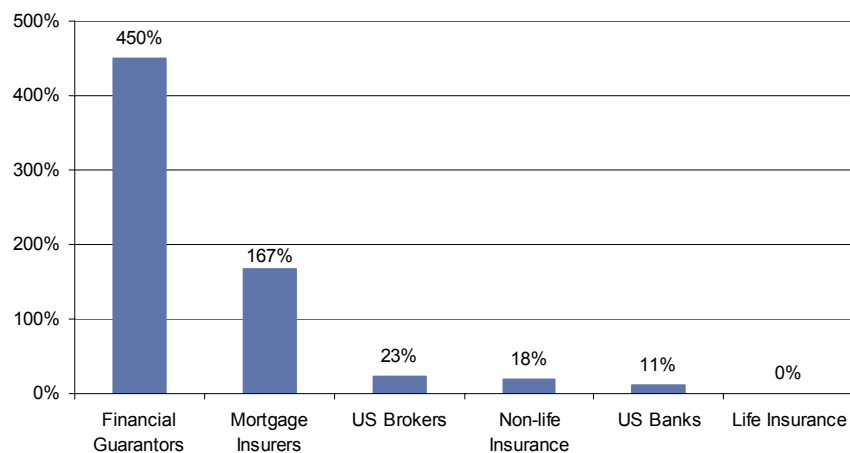


Source: Company data, Goldman Sachs Research Estimates. Note: PMI's CDO exposure reflects its investment in FGIC, which now accounts for \$884 million of PMI's book value.

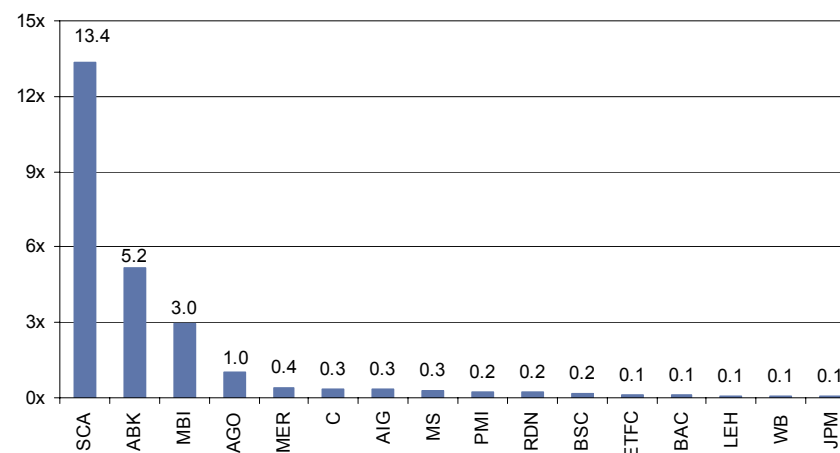
**Financial Guarantors appear to be the most overwhelmed by their CDO exposure as a percentage of book value. We believe it is likely that these firms will raise equity to remain well capitalized and secure their high ratings from the rating agencies.**

- For the Financial Guarantors, Mortgage Insurers, and Non-life Insurance firms, exposure will not in all cases equate to losses. To the extent that losses eventually come through, we expect capital raises for some of the financial guarantors and mortgage insurers such that these firms will remain well capitalized and preserve ratings.

- The Brokers are subject to mark-to-market or mark to model accounting treatment and will continue to experience significant earnings and book value revisions with falling home prices. With nearly 10% of the group's shareholder equity at risk of CDO write-downs, it is likely that the group's performance will continue to be lackluster at best as these losses materialize.

**Exhibit 4: Subprime mortgage CDO exposure as a % of shareholder equity**

Source: Company data, Goldman Sachs Research estimates.

**Exhibit 5: Company specific CDO exposure as a multiple of book value**

Source: Company data, Goldman Sachs Research estimates.

Clearly there are differences in the risk associated with each companies CDO exposure, as well as differences in the timing and magnitude of potential losses. That said, we estimate:

- Financial Guarantors:** significant risk from subprime mortgage CDOs. We estimate potential losses could sum to 86% of book value per share at SCA, 57% Ambac, 35% at MBIA and 10% at Assured Guaranty.
- Mortgage Insurers:** we estimate marks from subprime mortgage CDOs could equal 10% of book value per share at PMI due to exposure to its FGIC financial guaranty subsidiary. We estimate a lower potential loss at Radian equal to 4% of book value per share and MGIC does not have subprime mortgage CDO exposure, although clearly there is broader subprime exposure from the core business of insuring mortgage loans.
- Brokers:** Merrill Lynch is most exposed and we estimate that total marks (including marks announced to date and our estimate of future marks) will sum to 32% of book value. We estimate total marks at Citigroup will sum to 10% of book.
- We estimate smaller exposures to CDO losses in other sectors. For instance, we estimate that subprime mortgage CDO losses will equal just 1% of book value at AIG, Bank of America and Wachovia.

Buyers of distressed assets will find more attractive investing opportunities. Several firms are raising distress-oriented funds for investing in credit. Potential beneficiaries include BlackRock, Blackstone, OakTree, and Apollo among others.

**Exhibit 6: CDO Exposure by Company**

Ticker	Current Price per Share (11/16/07)	Sub-Prime CDO Exposure 3Q07 (\$ bn)	Potential \$ BV Implications from CDOs <sup>1</sup> (\$ bn)	Impact from CDO Per Share (\$ bn)	3Q2007 Book Value per Share	Pro-forma Book Value per Share	% Impact to Book Value per Share
BAC	\$44.37	\$17.6	\$3.0	\$0.4	\$30.45	\$30.01	(1%)
WB	\$39.14	5.8	1.1	0.4	36.94	36.56	(1%)
<b>Average - Banks</b>							
BSC	\$99.07	2.0	0.6	4.0	91.82	87.80	(4%)
C	\$34.00	43.2	12.6	2.5	25.54	23.00	(10%)
ETFC	\$5.44	0.6	0.2	0.4	9.75	9.37	(4%)
JPM	\$43.09	8.3	2.4	0.7	35.72	35.01	(2%)
LEH	\$62.38	1.8	0.5	1.0	38.29	37.28	(3%)
MER <sup>5</sup>	\$56.11	15.8	10.5	12.8	39.60	26.85	(32%)
MS	\$52.90	10.4	3.0	2.9	32.14	29.28	(9%)
<b>Average - Brokers</b>							
AGO <sup>3</sup>	\$20.90	1.6	0.5	NA <sup>4</sup>	37.58	33.77	(10%)
ABK <sup>3</sup>	\$27.46	29.2	8.5	NA <sup>4</sup>	88.07	38.21	(57%)
MBI <sup>3</sup>	\$37.19	19.3	5.6	NA <sup>4</sup>	80.08	52.37	(35%)
SCA <sup>3</sup>	\$5.95	18.0	5.3	NA <sup>4</sup>	40.86	5.89	(86%)
<b>Average - Financial Guarantors</b>							
GNW	\$25.56	0.0	0.0	0.0	28.73	28.73	(0%)
LNC	\$59.76	0.0	0.0	0.0	43.68	43.68	(0%)
MET	\$63.97	0.1	0.0	0.0	44.10	44.08	(0%)
PFG	\$66.31	0.1	0.0	0.1	26.43	26.31	(0%)
<b>Average - Life Insurers</b>							
MTG	\$21.84	0.0	0.0	NA	49.30	49.30	0%
PMI <sup>2</sup>	\$12.65	0.9	0.6	7.1	43.96	36.88	(16%)
RDN	\$12.46	0.8	0.1	1.5	42.86	41.32	(4%)
<b>Average - Mortgage Insurers</b>							
AIG	\$56.44	35.2	0.6	0.2	40.81	40.59	(1%)
ALL	\$52.64	0.1	0.0	0.0	37.45	37.45	0%
CNA	\$34.98	0.4	0.0	0.0	37.23	37.23	0%
ENH	\$38.03	0.0	0.0	0.0	32.81	32.81	0%
HIG	\$93.00	0.0	0.0	0.0	60.41	60.41	0%
TRV	\$52.72	0.0	0.0	0.0	40.54	40.54	0%
XL	\$63.20	0.1	0.0	0.0	56.45	56.45	0%
<b>Average - Non-Life Insurance</b>							
<b>Industry Average</b>							<b>(11%)</b>
<b>Industry Median</b>							<b>(2%)</b>

<sup>1</sup> Implications from mark to market, mark to model, or capital raises depending on company and sector

<sup>2</sup> Sub-prime exposure reflects carrying value at FGIC

<sup>3</sup> Tangible book value reflect adjusted book value for these companies

<sup>4</sup> NA due to potential equity capital raising

<sup>5</sup> MER does not include \$20 bn in off-balance sheet CDO exposure

**CDO implication assumptions**

Banks - BAC and WB based on management guidance

Brokers - assume 45% mark to market losses, and 35% tax rate

Financial Guarantors and MI's assumes - (1) capital raise equal to the losses implied by the current CDOs market prices minus the existing excess capital  
(2) capital raise at a 10% discount from current trading levels, (3) immediate losses equal to 50% of the total exposure.

Non-Life Insurance - assume management guidance

Source: Goldman Sachs Research, Company data, FactSet.

## Implication 2: Raising capital - the desperate and the needy

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**An inevitable implication of the current mortgage fallout will be the need for certain companies to raise capital. At current valuations, raising capital would be highly dilutive to existing shareholders. The specific root causes for capital raises vary by sector within the Financials universe, and will therefore take different forms depending on the situation. Of the companies in our coverage universe, we believe those in need of shoring up their balance sheets fall into two distinct buckets:**

- “The Desperate” – those companies which in certain scenarios will face a distinct risk of going out of business in the absence of directly raising capital;
- “The Needy” – those firms that are now viewing capital preservation as a distinct issue but could ultimately employ alternative methods to preserve capital, e.g. cutting the dividend.

### **The Desperate – Financial Guarantors & Mortgage Insurers**

We include the Financial Guarantors (MBIA, Ambac, Security Capital Assurance, and Assured Guaranty) and the Mortgage Insurers (PMI, MGIC, and Radian) in the "desperate" category when it comes to the possibility of raising capital.

- We expect continued deterioration in the mortgage market to drive increasing rating agency pressures, ultimately forcing some companies to raise capital.
- For the Financial Guarantors, we worry that incremental capital needs due to rating agency downgrades of certain subprime RMBS-related transactions may exceed current excess capital levels. Even with capital raises, there is the potential for spillover effect on the municipal business. In the unlikely event that this would impact municipalities' ability to raise funding, there is the potential for broader government assistance.
- Within the space, we see particularly high risk for those companies with lower excess capital positions and/or relatively high levels of subprime RMBS and CDO exposure, and highlight Ambac and Security Capital Assurance as being most at risk for having to raise capital to avoid losing their AAA rating.
- On the Mortgage Insurers, our concern is that the rating agencies will force the mortgage insurers to raise capital as mortgage losses continue to build and extend beyond 2008. Within the group we view Radian as being at the top of the list in terms of being most at risk for having to raise capital.
- We expect valuations to remain under pressure due to persisting concerns in the mortgage market. However, even factoring in severe loss scenarios and highly dilutive capital raises, the stocks trade inline to below pro forma book value.

**Exhibit 7: Capital raise is essential in the event of stress but comes at a real cost to existing shareholders**

\$ in millions

Financial guarantors								
Company	Ticker	Capital raised	Assumed FG losses**	Other income	Price at equity raise***	Current Adj. BVPS	Pro forma Adj. BVPS	Current share price
Ambac	ABK	4,300	2,900	0	\$25	\$88.07	\$38.21	\$28.24
MBIA	MBI	2,900	1,950	0	\$34	\$80.08	\$52.37	\$38.14
Security Capital Assurance*	SCA	3,750	1,875	0	\$5	\$40.86	\$5.89	\$5.96
Assured Guaranty	AGO	10	250	0	\$19	\$37.58	\$33.77	\$21.22

Mortgage insurance								
Company	Ticker	Capital raised	Assumed MI losses****	Other income	Price at equity raise***	Current BVPS	Pro forma BVPS	Current share price
MGIC	MTG	382	2,371	281	\$20	\$49.30	\$26.65	\$22.30
PMI	PMI	345	1,259	-429	\$13	\$43.93	\$20.63	\$13.99
Radian	RDN	1,520	2,521	450	\$11	\$42.86	\$16.75	\$12.60

\*: Security Capital Assurance has not disclosed excess capital levels. For the purposes of conservatism, we assume excess capital levels are zero.

\*\* : We assume the guarantors recognize 50% of the losses immediately. However, in actuality paid claims will materialize as principal and interest comes due.

\*\*\* : We assume a price at equity raise equivalent to a 10% discount to current stock prices.

\*\*\*\* : Mortgage insurance losses reflect losses net of premiums, investment income, expenses and reinsurance over 5 year period.

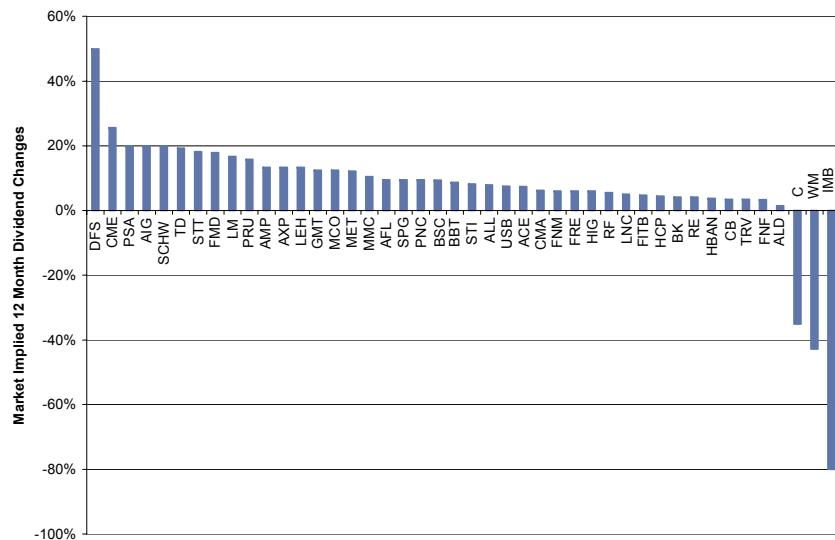
Source: Goldman Sachs Research estimates, Company filings.

**The Needy – Citigroup, Washington Mutual, First Horizon, and National City**

We include Citigroup, Washington Mutual, First Horizon, and National City in the "Needy" category, as each appears to be facing capital preservation needs.

- We believe this group could find costly alternative methods to preserve and/or build capital, specifically: **Citigroup and Washington Mutual will likely cut their dividends**, while **First Horizon** and **National City** are also in capital preservation mode. For Citigroup and Washington Mutual, the options market implies 35% and 43% dividend cuts, respectively.
- Based on our analysis of Citigroup's possible capital shortfall relative to its target ratio, a dividend cut of up to 42% could allow it to avoid raising public equity.

**Exhibit 8: The options market is pricing in dividend cuts at C, WM and ImyMac**



Note: We excluded companies for which the market implied no change.

Source: Goldman Sachs Research estimates.

**Exhibit 9: More broadly, payout ratios for Financials in general are moving higher – unfortunately, this reflects shrinking earnings**



Source: Goldman Sachs Research estimates.

## Implication 3: Some business models are permanently impaired

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**Without high margin subprime/Alt-A revenue streams, normalized returns in the mortgage business will be permanently and significantly lower. Investor appetite for high yielding subprime mortgage securities fueled the home pricing bubble and this investor market is not coming back.**

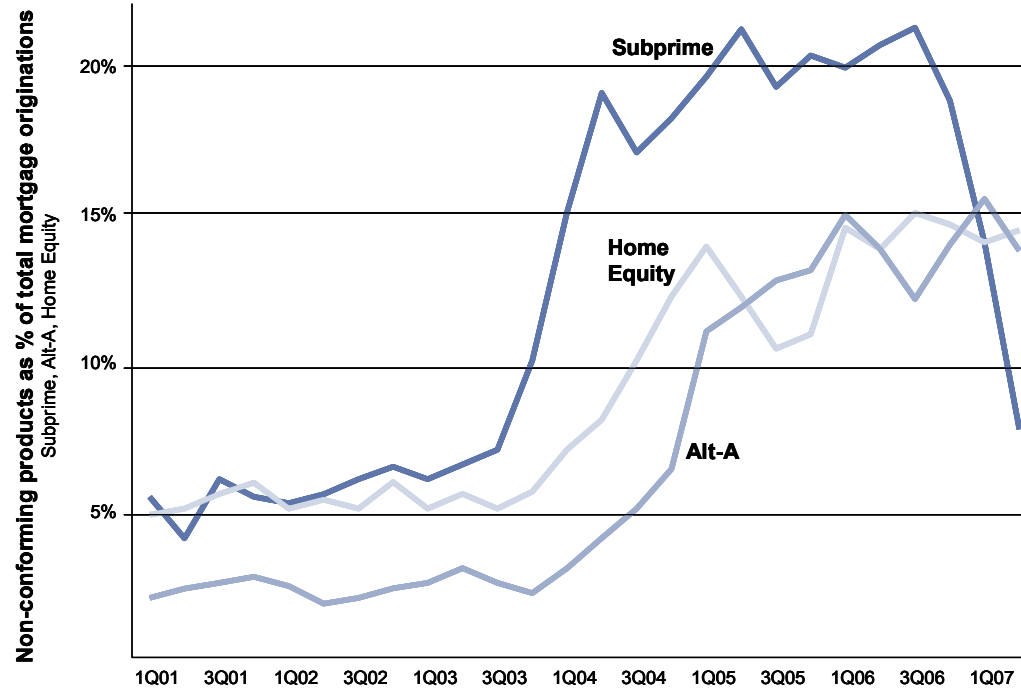
**In the best of credit times, ROAs for subprime originators equaled a highly attractive 2-3% versus 1% for conforming mortgage providers. New legislation also proposes to permanently shift the mix of loans toward lower-margin, conforming mortgages. The economic consequence for mortgage participants is non-trivial; normalized returns may fall by 40%.**

**Brokers bruised from the fallout will significantly reduce risk appetite levels going forward and refocus on the client franchise, especially in the case of Citigroup, Merrill Lynch and Bank of America Securities. Brokers will also rethink their business model targeted at the subprime and Alt A market.**

**We maintain our Cautious view of Mortgage Finance, along with our Sell rating on Countrywide Financial.**

- Even after housing fundamentals trough, proposed legislation may also preclude the return of non-conforming loans, dampening normalized returns for the mortgage business.
- We expect the mortgage lenders to respond by cutting expenses aggressively, and we anticipate some investment banks will exit the mortgage business altogether.
- Other related business models are currently impaired, although not permanently, include: the Financial Guarantors (sworn off risky yet profitable CDO-related business), Student Lenders (increasingly reliant on riskier private loans following new legislation), and Mortgage Insurers (more agency-related, less structured and other higher risk business).

**Exhibit 10: Non-conforming loans spiked as a proportion of total mortgage originations in 2004; we believe the sharp reversal in 2007 may be permanent.**



Source: Mortgage Bankers Association, Census Bureau, Goldman Sachs Research estimates.

**Subprime is not coming back.** In 2004, subprime mortgages, along with Alt-A, option ARMs, home equity and other non-conforming loans spiked as a proportion of total mortgage originations; but this trend has reversed sharply in 2007, and should continue to do so.

We believe this reversal may be permanent, given proposed legislation (which we believe stands a good chance of making it into law in some form) along with the elevated perception of risk associated with US mortgage loans.

**Exhibit 11: Two key aspects of proposed mortgage legislation**

The Mortgage Reform and Anti-predatory Lending Act of 2007

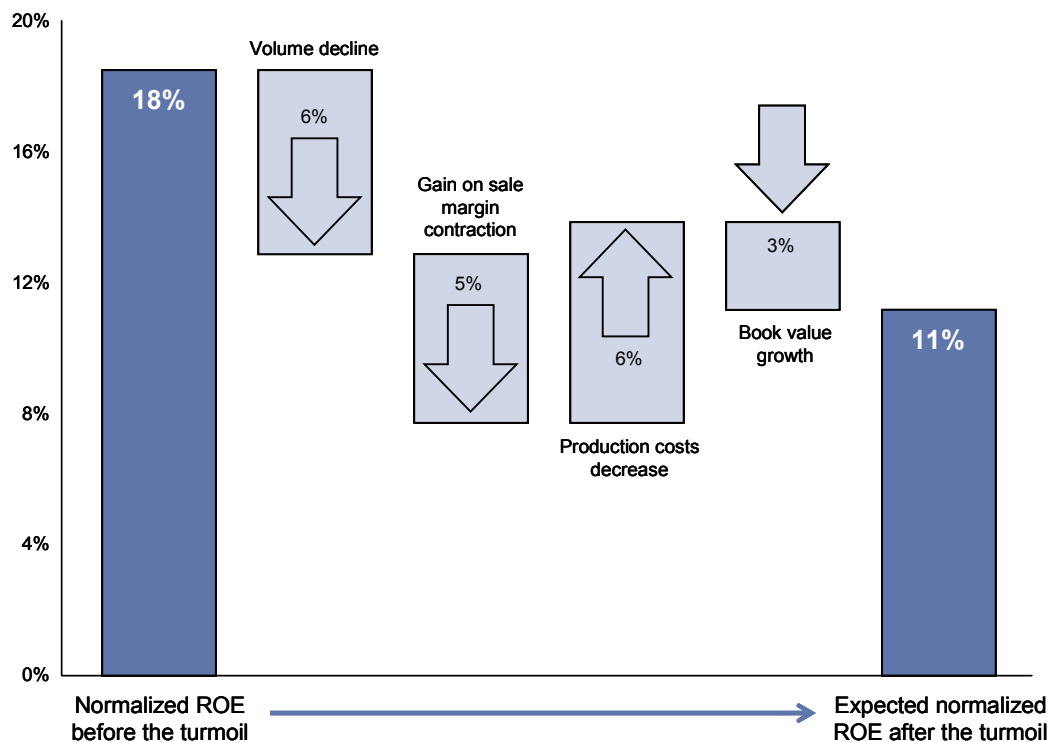
Section	Legal wording	GS interpretation
Sec. 103. ANTI-STEERING	“No mortgage originator may receive from any person, and no person may pay to any mortgage originator, directly or indirectly, any incentive compensation (including yield spread premium) that is based on, or varies with, the terms of any residential mortgage loan.”	Sales commission rates would be standardized among different types of mortgage products, to prevent incentives to brokers selling riskier products to borrowers.
Sec. 204. SECURITIZER LIABILITY	“...a civil action which may be maintained against a creditor with respect to a residential mortgage loan... may be maintained against an assignee, including a securitizer, of such residential mortgage loan, acting in good faith, for the following liabilities...”	Secondary market participants would be liable for the non-conforming underwriting standards practiced by mortgage lenders.

Source: House Financial Services Committee, Goldman Sachs Research.

Proposed legislation may preclude the return of non-conforming loans. The Mortgage Reform and Anti-predatory Lending Act of 2007 proposes, among other things, "anti-steering" and "securitizer liability" which, taken together, would seal the fate for subprime, in our view.

**Exhibit 12: Ultimate consequences of a permanently-skewed production mix**

normalized ROE for CFC to fall from 18% to 11%



Source: Company reports, Goldman Sachs Research.

We anticipate serious financial consequences of a permanently-skewed production mix (i.e. towards conforming loans) for mortgage lenders and investment banks.

Net gain on sale income (a product of net gain on sale margins and production volumes) for the mortgage originators has been cut by more than half; these revenues may not come back. In response, mortgage lenders are cutting costs aggressively down to levels that we anticipate may need to be maintained for some time.

We estimate that normalized returns for the nation's largest mortgage originator, Countrywide, have fallen from 18% to 11% (a 40% decline) as a result of a permanently-skewed production mix.

We believe that securitizer liability, if passed into law, would inspire some investment banks to exit the mortgage business altogether.

## Implication 4: Broader consumer credit deterioration is coming

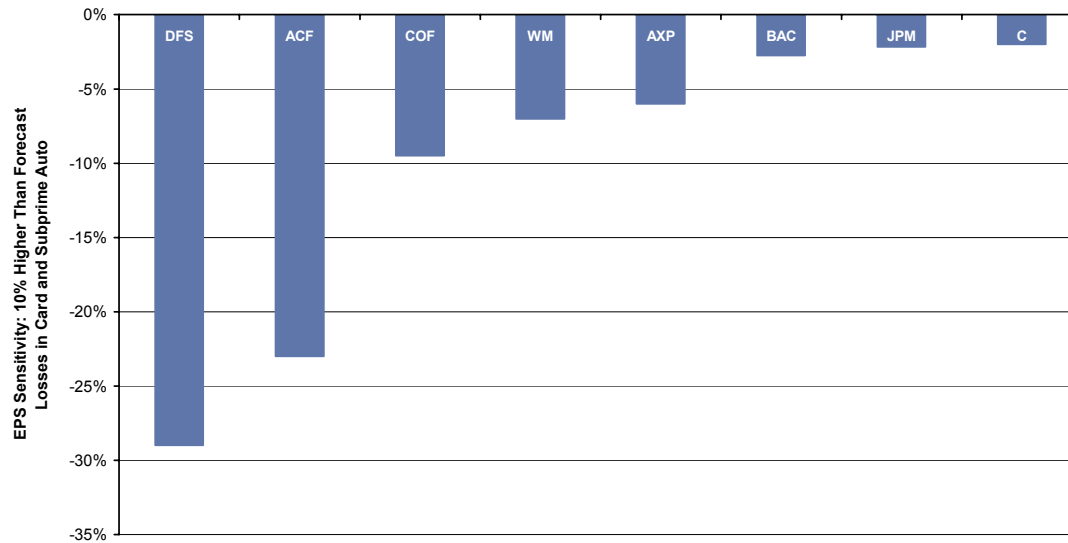
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**Falling home prices have put 1/3 of the US (by GDP) in or near recession. Card and auto losses will rise. If the economy is worse than expected, earnings revisions will be negative.**

**We see the greatest downside risk (-20% or more) at AmeriCredit and Discover. We rate AmeriCredit Sell and we have downgraded Discover from Neutral to Sell. American Express has much less exposure and a better network than Discover. Consequently, we recommend a pair trade between American Express (Buy) and Discover (Sell).**

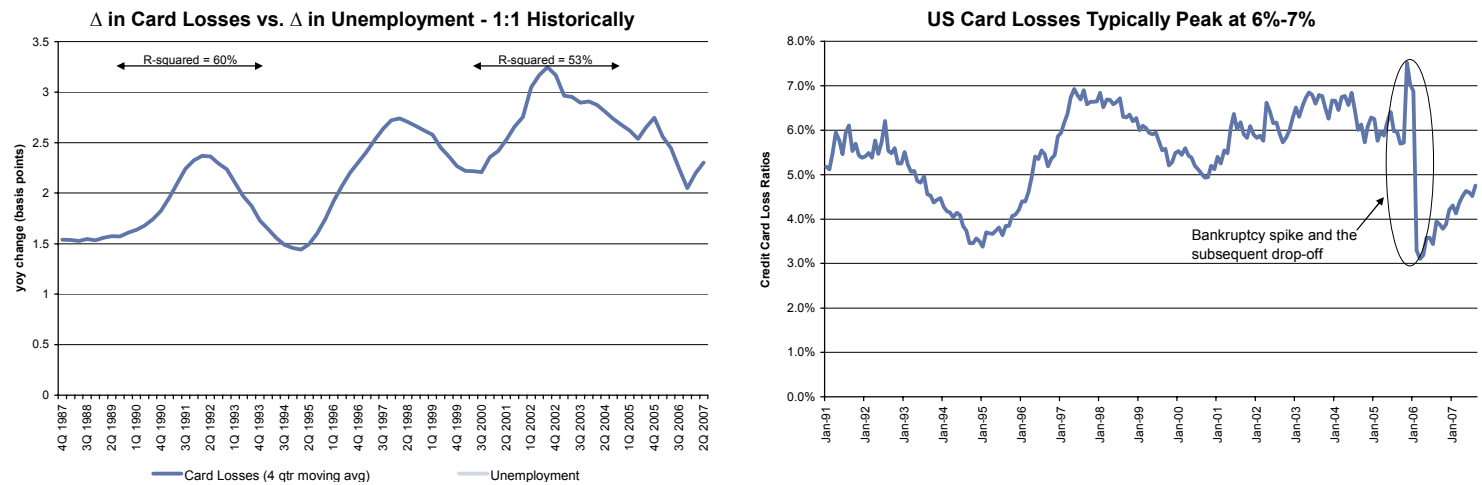
- The downturn in housing is spilling over into employment in some states and is leading to higher consumer losses. Specifically, despite a still relatively low unemployment rate nationally, about one-third of the country appears to be in a recession, based on state-level employment deterioration and falling home prices as the yardstick. California is the biggest concern as it represents 13% of US GDP.
- The early indicators that credit card credit quality is deteriorating include Capital One's experience that card delinquencies have risen 54bp over the past year in states that have experienced the greatest housing depreciation versus flat delinquencies elsewhere. Moreover, delinquency roll rates have recently started to deteriorate.
- Historically, employment has had a big impact on cards with a 1:1 relationship between rising unemployment and rising card losses. This was true in both the early 1990s and early 2000s while the mid-1990s was even worse due to rising bankruptcies and risk expansion in the industry. Peak losses in cards have been 6-7% historically for diversified issuers.
- We estimate that higher than modeled losses will rise further and act as a 2-3% earnings headwind for diversified banks with large card portfolios – such as Bank of America, Citigroup, and JPMorgan Chase.
- Less diversified lenders will be hit harder. We estimate that losses rising 10% more than expected in 2008 would result in 20% negative earnings revisions in 2008 at Discover and AmeriCredit.
- We believe American Express has sold off on credit concerns, but sensitivity is actually very manageable as a 10% increase in losses results in just a 5% hit to earnings. This reflects American Express' business mix, as the company generates more revenues from interchange fees via its payments network. American Express also has the lowest exposure to subprime of any major issuer. About 17% of the portfolio is subprime versus about 25% for most issuers.
- While not included in our analysis, the impact of higher losses would be partially offset by higher late fees and better yields. Large issuers such as Capital One and Bank of America estimate that about 25-50% of higher losses can be offset in this manner.

**Exhibit 13: Losses rising further than estimated = earnings going down a lot for undiversified lenders**  
 EPS sensitivity to losses being 10% higher than forecast in 2008



Source: Company data, Goldman Sachs Research estimates.

**Exhibit 14: Credit card losses typically move with unemployment; card losses typically peak at 6-7%**



Source: Federal Reserve, Bureau of Labor Statistics, Fitch, Goldman Sachs Research.

**Exhibit 15: 1/3 of the country is in or near recession – based both on unemployment indicators and home price indicators**

note: our GS Economist estimates that a &gt;60bps increase in unemployment is historically a strong indicator of state level recessions

**EMPLOYMENT SCREEN: % of US that is likely in or nearing a recession**

	- Unemployment Rate -		Change in Unemployment	State as % of US GDP	yoy Home Price Decline
	Jan 07	Sep 07			
<b>High Risk States</b>					
Illinois	4.2%	5.2%	100 bps	4%	1%
California	4.8%	5.5%	70 bps	13%	-10%
Florida	3.3%	4.0%	67 bps	5%	-6%
Nevada	4.4%	5.0%	63 bps	1%	-8%
<b>States which never recovered from the last recession</b>					
Michigan	7.1%	7.4%	30 bps	3%	-5%
Ohio	5.5%	5.8%	33 bps	4%	-2%

High Risk or In a Recession -> **30.4%****HOME PRICE SCREEN: % of US that is likely in or nearing a recession**

	- Unemployment Rate -		Change in Unemployment	State as % of US GDP	yoy Home Price Decline
	Jan 07	Sep 07			
California	4.8%	5.5%	70 bps	13%	-9.9%
Nevada	4.4%	5.0%	63 bps	1%	-7.9%
Louisiana	4.1%	4.0%	-3 bps	1%	-7.7%
Florida	3.3%	4.0%	67 bps	5%	-6.0%
Arizona	4.1%	3.6%	-57 bps	2%	-6.0%
Michigan	7.1%	7.4%	30 bps	3%	-5.0%
Rhode Island	5.0%	5.0%	3 bps	0%	-4.7%
Virginia	2.9%	3.0%	13 bps	3%	-4.2%
District of Columbia	6.1%	5.7%	-47 bps	1%	-4.2%
Massachusetts	5.2%	4.7%	-57 bps	3%	-4.1%

High Risk or In a Recession -> **32.0%**

Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Loanperformance, Goldman Sachs Research. Unemployment and home price data are three month moving averages.

## Implication 5: A consolidation wave forthcoming, but likely not yet

Despite attractive valuations, we do not believe a broad wave of industry consolidation will occur in the financial sector for another 12-18 months. Credit risk, balance sheet deterioration, and business model risk continues to outweigh low valuations and funding synergy benefits. We do not believe this will be the case a year or two from now. At that point, we believe buyers will emerge when:

- Deep pocketed investors with an appetite for risk and volatility have enough conviction to accept the ramification of potential ongoing home price declines. To date, the smartest distressed investors have yet to reach this level of conviction;
- For buyers to eventually accept the level of credit risk, deal pricing may offer little upside to potential downside for shareholders.
- We focus on consolidation. That said, there could be cases of “deconsolidation” as well as some companies rationalizing their businesses amid the current market turmoil.

**Exhibit 16: Market deterioration leads to weakened business models and ultimately M&A or consolidation**

	Fundamentals deteriorate	Business attempts stabilization	Valuations not reflective of deterioration	Model impairment	Consolidation & acquisition
<b>Period</b>	Late 2006 to 2Q07	2Q07 - 3Q07	Current Stage	Next 12 months	2H2008 - 2009
<b>Catalyst</b>	Home prices begin to decline – 4% to date	Companies try to cut costs, limit losses	Deterioration beyond initial estimates – home prices fall another 13-14%	Market shakes out – some businesses are impaired, others are not	Some businesses recover
<b>Market Reaction</b>	First leg of market decline	Uncertainty, pessimism builds further	Negative sentiment keeps valuations under pressure	Buyers start to get comfort and look for deals	Consolidation wave

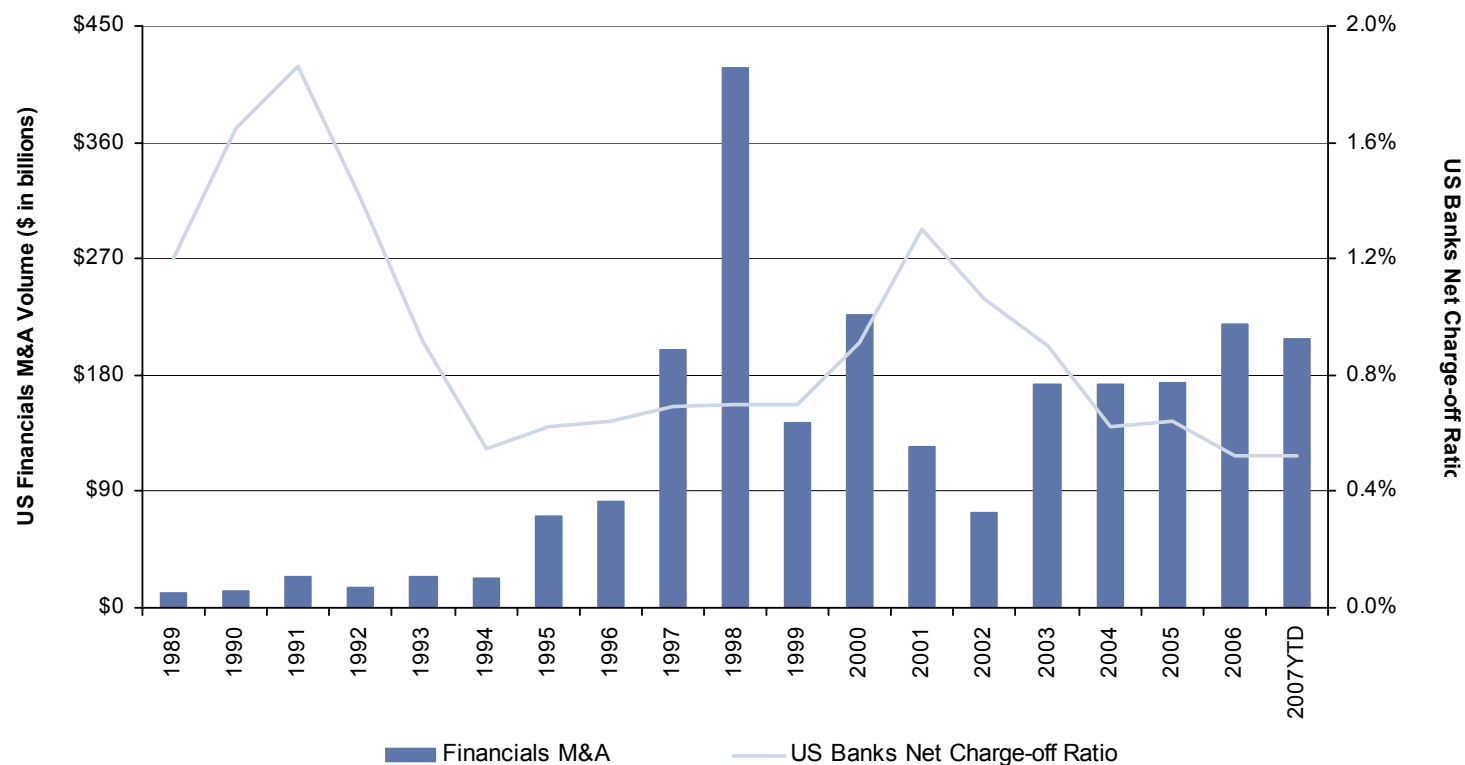
Source: Goldman Sachs Research.

## There certainly appears to be a case for consolidation

We believe acquisitions are unlikely to occur until balance sheets stabilize and a market bottom is in sight. Past consolidation has been the direct result of significant dislocation in the financial markets and amid periods of improving US credit conditions.

- US banking sector (1990-1998). During this period, the top 25 banks went from holding 22% of US industry assets to 54%. The savings and loan crisis and deterioration in the value of commercial real estate and were the catalysts for consolidation.
- Consumer finance companies (1998-2003). Some firms were acquired during periods of strength (Associates, MoneyStore) while others were bought in distress (Household). None of the acquisitions have worked particularly well for the acquirers.

**Exhibit 17: Financial services M&A has ticked up in periods of good credit; the US market is heading in the other direction**  
financials services M&A volume versus the credit cycle (shown via US Banks net charge-off ratio)



Source: SNL, Goldman Sachs Research. Note: Includes Banks & Thrifts; Specialty Finance; Securities & Investments; Other Fin'l Svcs; Insurance; Insurance Broker; Other Insurance.

Two primary drivers will push consolidation forward in US financial services:

- **Funding synergies:** Different funding strategies exist across different models, but access to capital is at the core of a firm's ability to compete. Inability to access cheap capital for the mortgage insurers, guarantors, and originators will put them at a competitive disadvantage to peers and at risk of losing core business. Better capitalized peers that have access to cheaper funding via deposits (banks) or a lower borrow rate (insurance firms, brokers), will be the primary consolidators. This will be advantage for banks which are principally deposit funded.
- The US dollar and valuation premium has deteriorated steadily. International firms are increasingly eyeing US targets given an inherent discount to previous valuations. In some cases, the US dollar has lost up to 15% in relative value over the past half year. In addition to the currency shift, European financial valuations have moved higher than their US counterparts, which incrementally increase the likelihood of European and Asian led cross-border transactions. In addition, there is unlikely a near-term catalyst to change the trend of currency, and foreign investors have the luxury of waiting for a better entry point.

### **After a bit more pain, buy the good businesses with flaws**

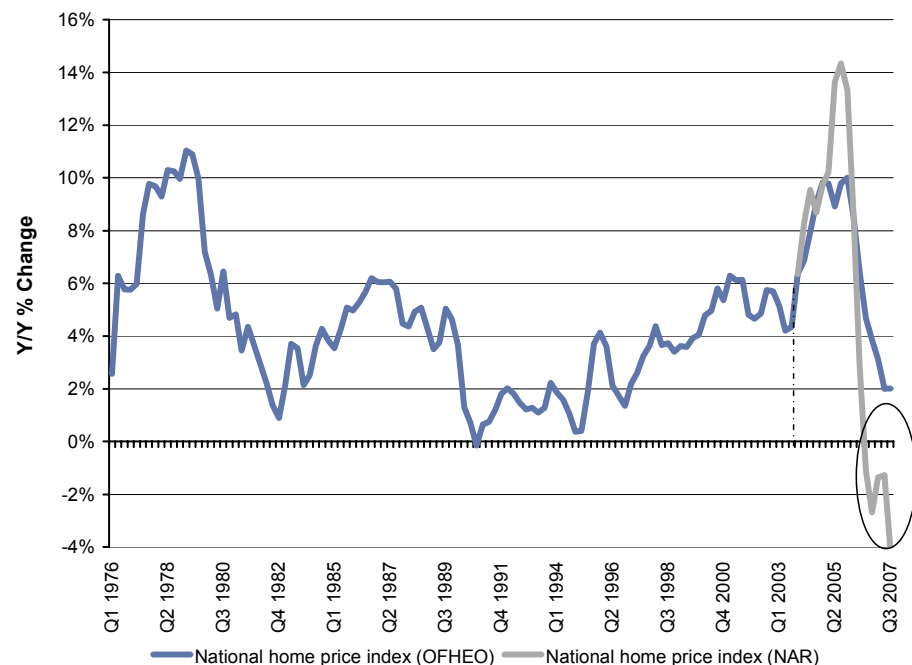
Once a bottom is apparent in the housing fall-out, there will be some solid but tarnished companies investors will view as likely acquisition targets. Businesses that provide a significant benefit to the financial system, such as the Mortgage Insurers and Guarantors, provide imperative industry value and despite shaky near-term footing, they will become interesting franchises to own following the majority of home price deterioration.

**Further, we would not be surprised to see the first acquisition of a major US broker or commercial bank by an emerging market institution.** While most US brokers and some US banks have broadened their geographic presence over the past decade, none has developed a truly robust Chinese or Indian offering. With these economies growing at multiples of the US, we would not be surprised to see a larger international bank attempt to gain access to the US financial services community through acquisition.

## Part II: "The Problem in Pictures" – the root cause of the mortgage crisis

### Exhibit 18: Home prices are now falling nationally with substantial declines in a number of major markets

national home price indices and the 10 states with the largest year over year decline in home prices



State	2005	2006	2007
<b>California</b>	<b>16%</b>	<b>-1%</b>	<b>-11%</b>
Nevada	12%	-3%	-8%
Louisiana	14%	4%	-8%
<b>Florida</b>	<b>28%</b>	<b>1%</b>	<b>-6%</b>
Arizona	38%	-2%	-6%
Pennsylvania	13%	1%	-5%
Michigan	1%	-7%	-4%
District of Columbia	21%	2%	-4%
Massachusetts	4%	-5%	-3%
Rhode Island	6%	-3%	-3%

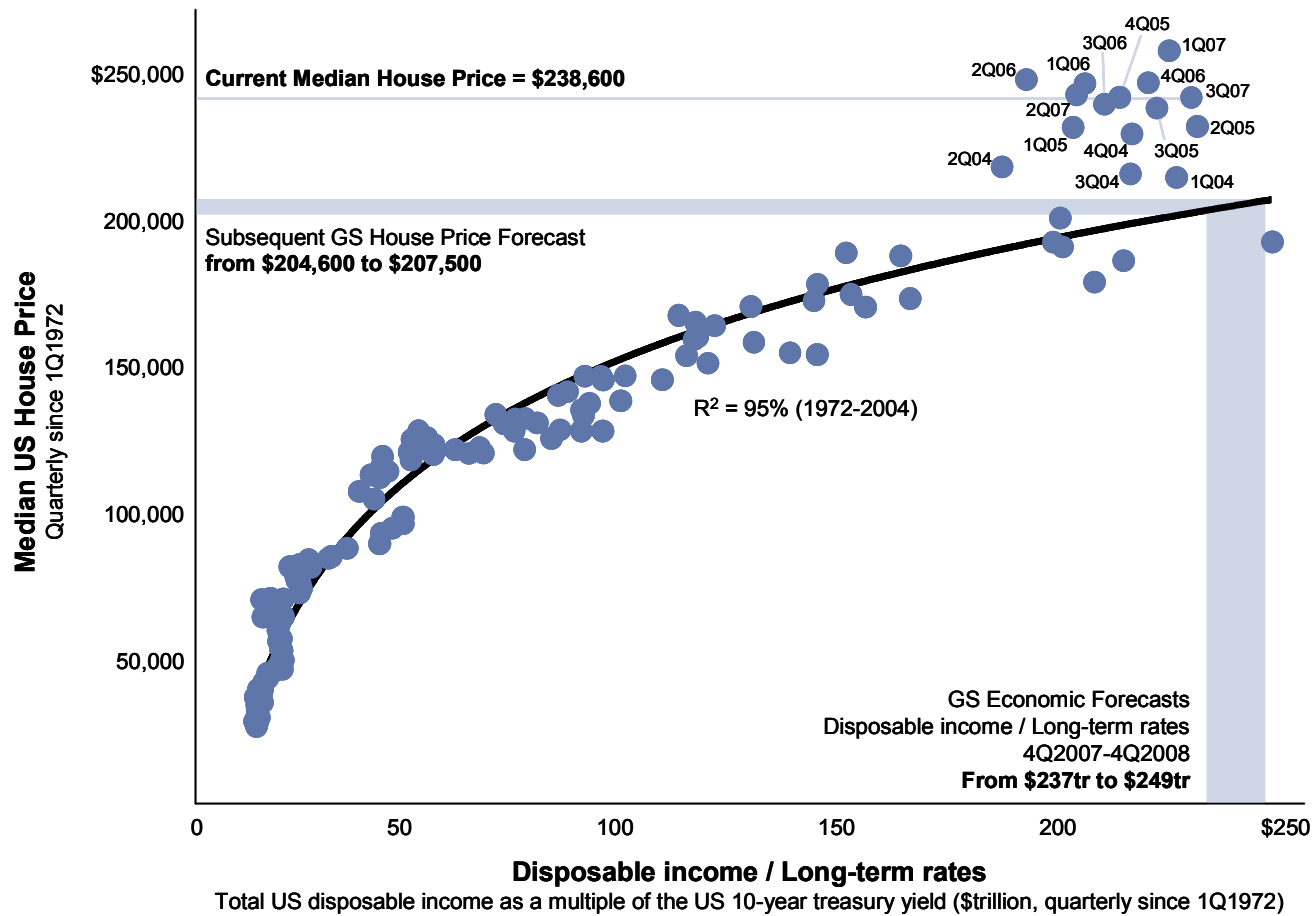
Note: 2005 and 2006 as of year end. 2007 as of August.

Source: OFHEO, National Association of Realtors, Loanperformance HPI for state level data, Goldman Sachs Research.

We are now close to a year into national home price declines, with home prices falling 4% nationally.

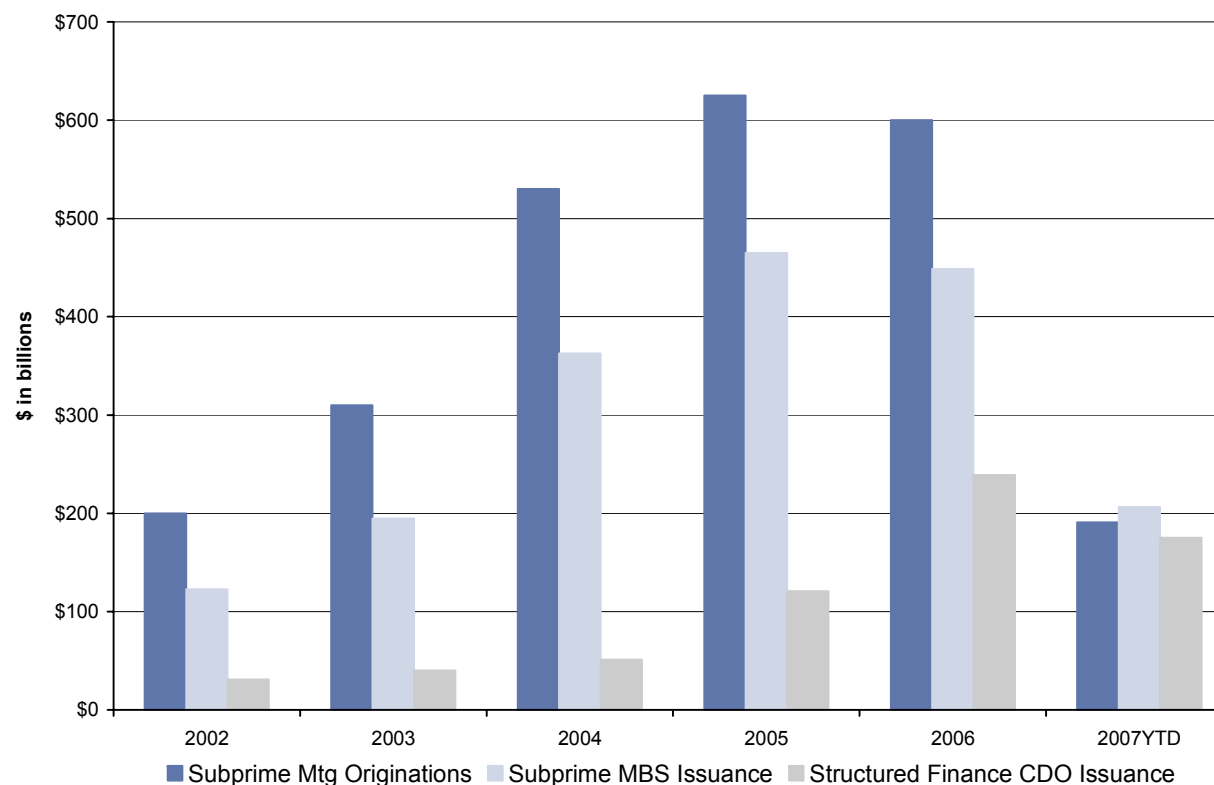
Severe home price declines now evident in most severe boom and bust states such as California and Florida, as well as Arizona and Nevada. The dramatic appreciation in 2005 in these states suggests that there could still be a long way to fall.

**Exhibit 19: House prices are 13%-14% over-valued, relative to current and forecast economic conditions**



Source: Census Bureau, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

We estimate that home prices have another 13-14% to fall. All the problems to date have come from just a 4% decline – consequently, another 13-14% would be dramatic.

**Exhibit 20: Subprime MBS funded the subprime mortgages; subprime CDOs helped fund the subprime MBS**

Source: *Inside Mortgage Finance, Asset Backed Alert, Goldman Sachs Research.*

Pain is flowing back to the capital markets. Investor appetite for high yielding subprime mortgage securities fueled the home pricing bubble and this investor market is not coming back.

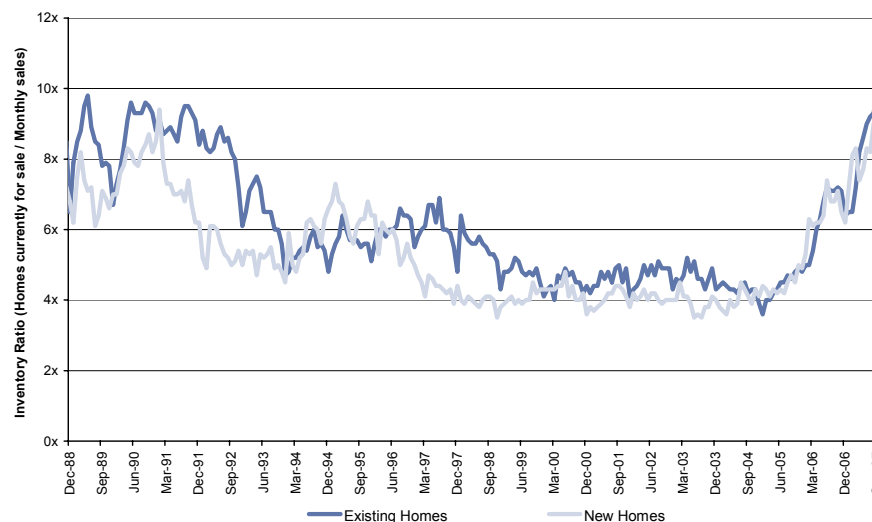
Even after the housing market peaked in 2005, the flow of subprime mortgages and subprime MBS continued while structured finance CDO issuance kept booming in 2006 and into 1H2007. Not all structured finance CDO collateral is subprime MBS; however, Fitch estimates that during 2005 and 2006, 50-60% of collateral in structured finance CDOs was subprime MBS.

**Exhibit 21: Corrections in home prices typically take years**  
prior regional home price cycles with double digit declines

State	Home Price Peak	% Decline	Time to Reach Bottom
Hawaii	1994	-16%	5 yrs
California	1990	-13%	4.5 yrs
Texas	1984	-12%	4.25 yrs
Massachusetts	1989	-11%	5 yrs
<b>Average</b>		<b>-13%</b>	<b>5 yrs</b>

Source: OFHEO, Goldman Sachs Research.

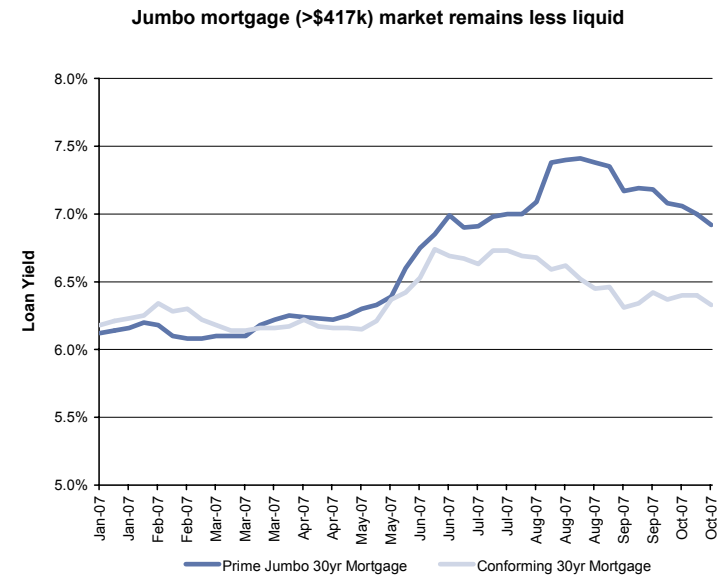
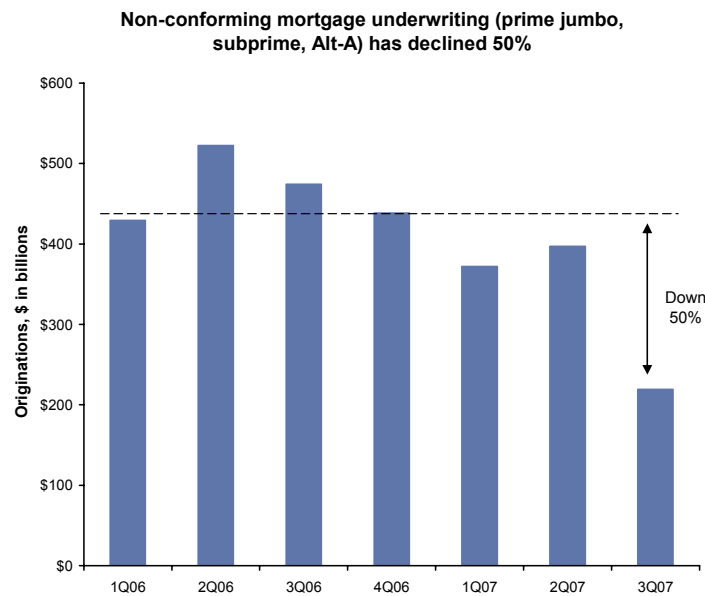
**Exhibit 22: Housing inventories are still rising – problems will not improve until levels turn**



Source: National Association of Realtors, Goldman Sachs Research estimates.

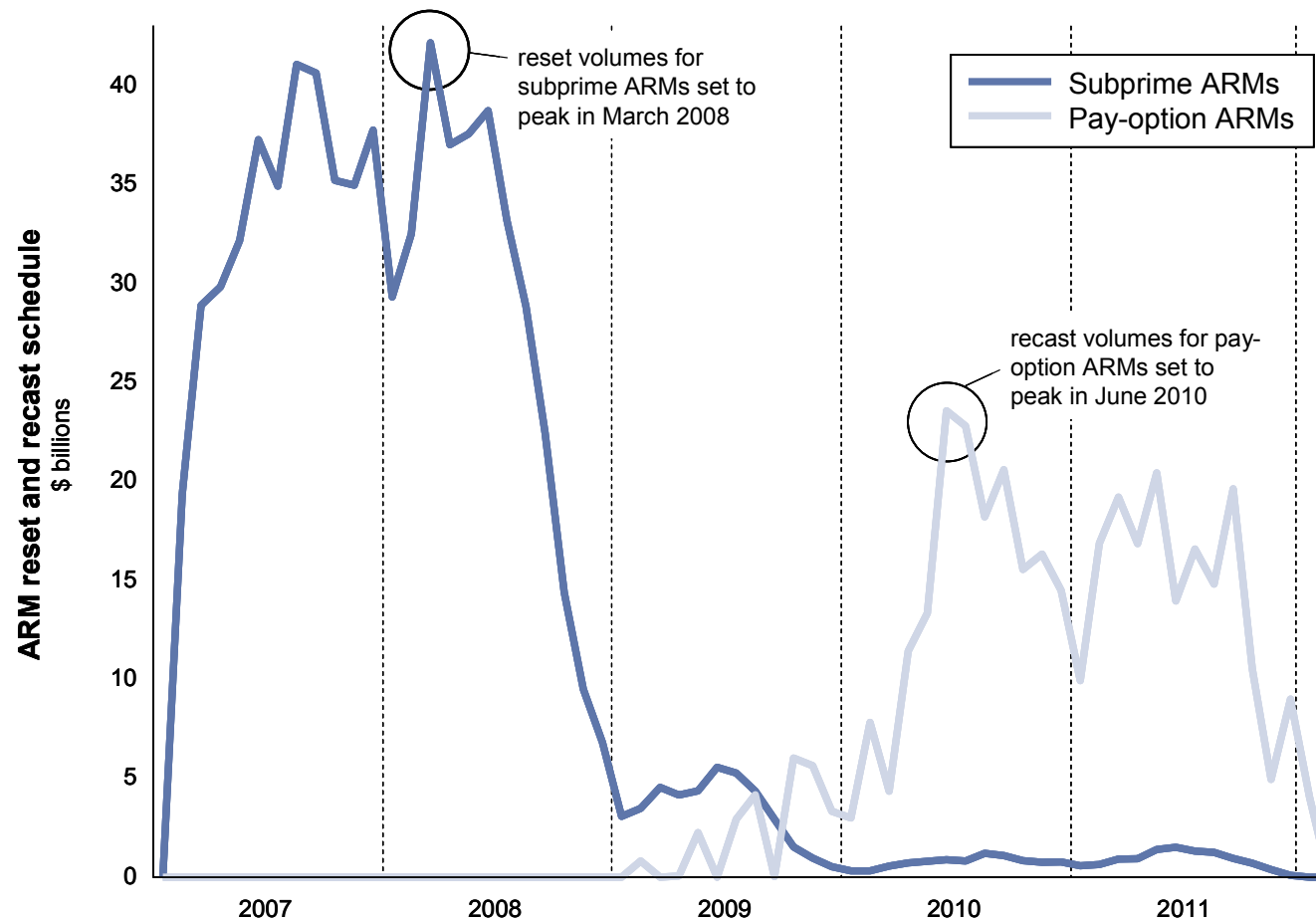
Declines in home prices typically take years to play out. We are currently finishing year 1. Historically, regional home price corrections >10% have taken 4 years to unfold. Corrections take years as homeowners are reluctant to sell at a loss. Homes remain overvalued and inventory builds. This is happening now as inventory = 10 months supply of homes.

**Exhibit 23: The plummeting of non-conforming mortgage credit availability is fueling the downward pricing trend**



Source: Goldman Sachs Research estimates.

Reduced liquidity compounds the problem. Lenders have pulled back. Non-conforming mortgage originations are down 50%. Jumbo mortgage spreads have widened considerably.

**Exhibit 24: We have yet to see the worst of residential mortgage credit deterioration**

Source: Goldman Sachs Research estimates.

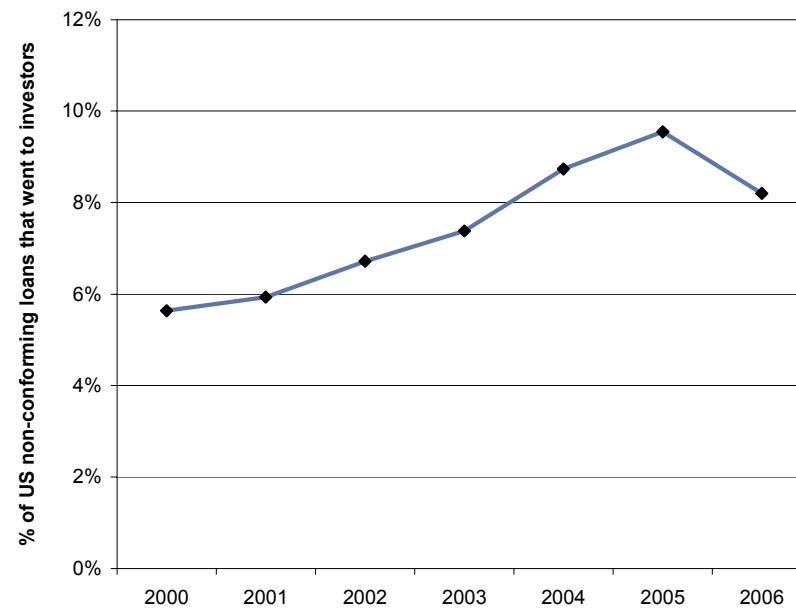
Subprime ARM resets were one of the catalyst for the mortgage crisis. Our estimated schedule for adjustable rate mortgage resets (when low-interest teaser rates reset to current rates) and recasts (when the pay-option expires and borrowers are required to pay the fully-amortized rate) suggests that the worst of residential mortgage credit deterioration has yet to be seen across this country.

Monthly reset volumes for subprime adjustable-rate mortgages peak (at \$42 bn) in March 2008; recast volumes for pay-option adjustable-rate mortgages peak (at \$24 bn) in June 2010.

**Exhibit 25: Foreclosures spiking as borrowers facing rate resets can't sell or refinance**

Source: Mortgage Bankers Association, Goldman Sachs Research estimates.

Borrowers in a weaker financial situation are left in a vicious cycle: can't pay, can't refinance, can't sell. This has caused subprime ARM foreclosures to increase dramatically.

**Exhibit 26: At the peak investors were 10% of US home buyers and 20% in speculator markets in CA, FL, NV, AZ**

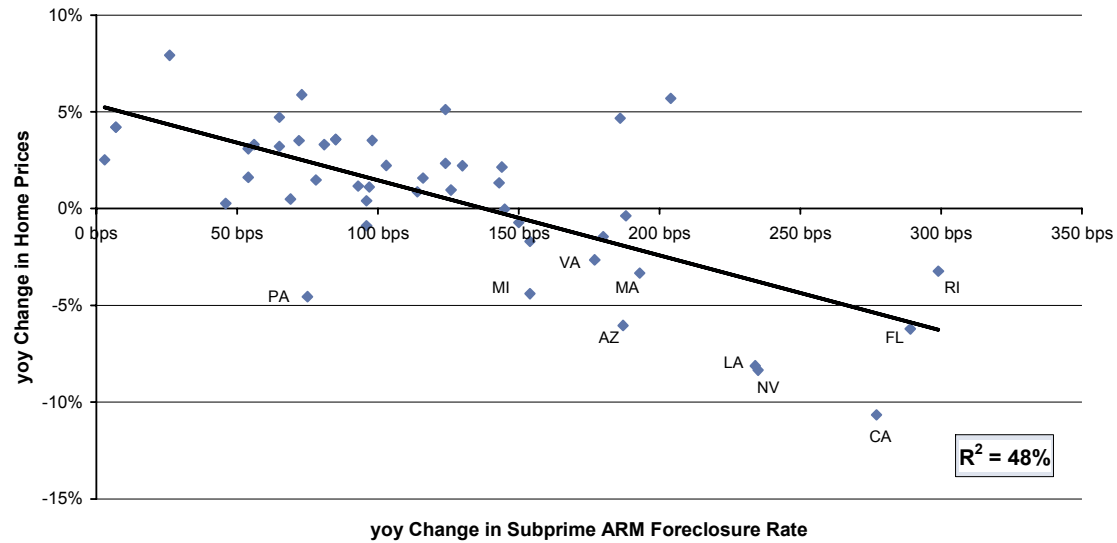
City	% of 2005 Non-conforming Purchase Loans to Investors
Fresno, CA	20%
Bakersfield, CA	19%
Chico-Paradise, CA	19%
Fort Walton Beach, FL	18%
Panama City, FL	18%
Naples, FL	18%
Sarasota-Bradenton, FL	18%
Reno, NV	17%
Phoenix-Mesa, AZ	17%
<b>Average</b>	<b>18%</b>

Source: Loanperformance, Goldman Sachs Research .

Investors have no incentive to keep carrying homes. 10% of non-conforming loans went to investors at the peak including up to 20% in some bubble markets in California, Nevada, Florida, and Arizona.

**Exhibit 27: Subprime foreclosures will bring down home prices for everyone**

**Borrowers defaulting on subprime ARMs and home price decline correlation**



Note: Scatter plot is for all US states except AL and HI.

Source: Mortgage Bankers Association, Loanperformance, Goldman Sachs Economics, Goldman Sachs Research.

**Vicious circle effect**

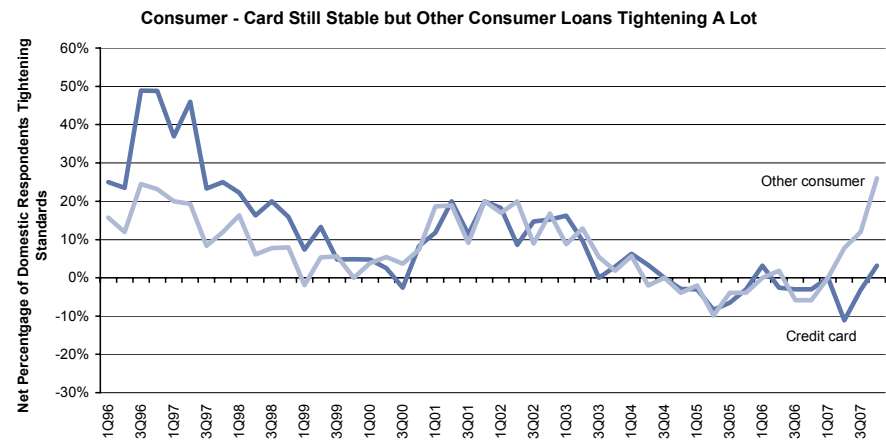
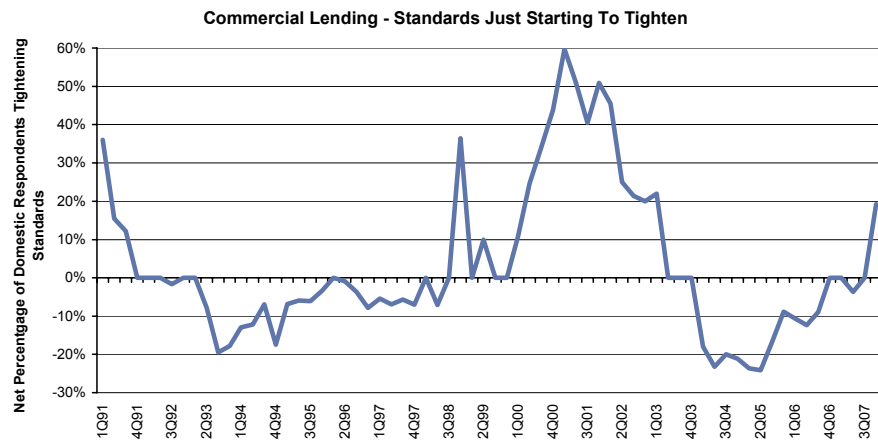
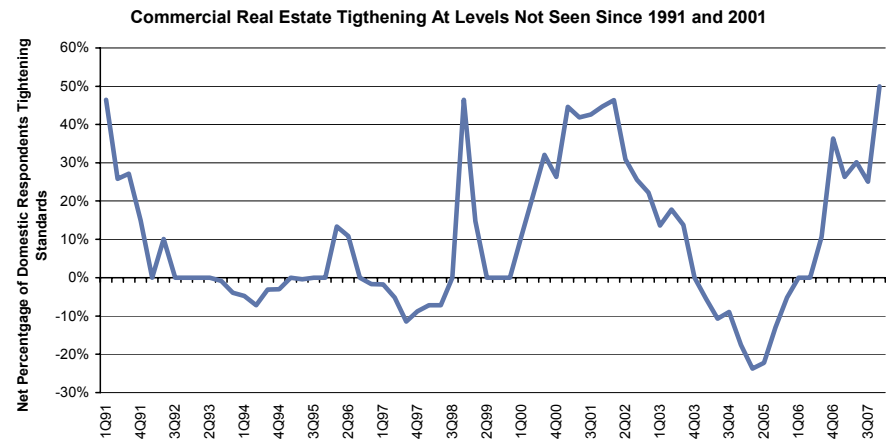
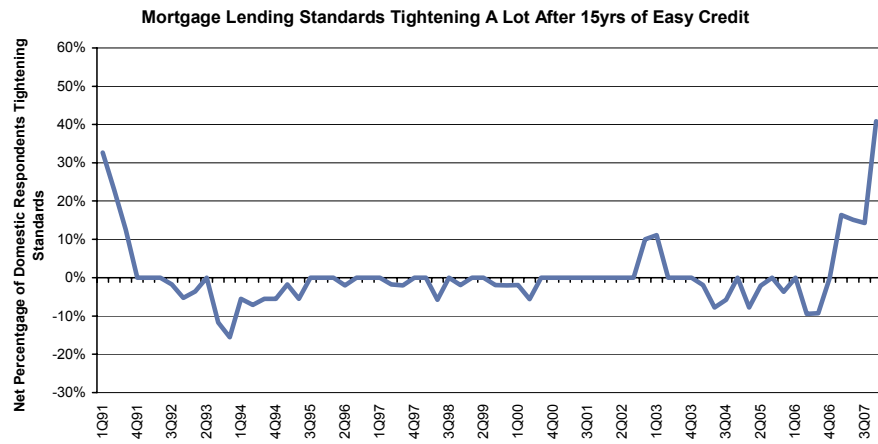
\* Foreclosures drag on prices by increasing the already high inventory of single-family homes on the market

\* Further, banks often wish to dispose of the houses quickly and are more willing to lower prices.

\*GS Econ estimates that every 100bps yoy increase in foreclosures for the total market =>10% home price decline.

Subprime foreclosures bring down home prices for the rest. Lenders foreclose and cut prices to sell homes to get rid of the problem. This forces home prices down for everyone.

**Exhibit 28: Banks are tightening lending standards (a lot)**  
 Federal Reserve Senior Loan Officer Survey



Source: Federal Reserve, Goldman Sachs Research.

As bad as the mortgage crisis has been, we still have to deal with spillover risk. Capital markets liquidity is considerably reduced and banks are tightening lending standards at a rate not seen since the last recession.

## Implication 1: Write-downs and losses will continue to mount

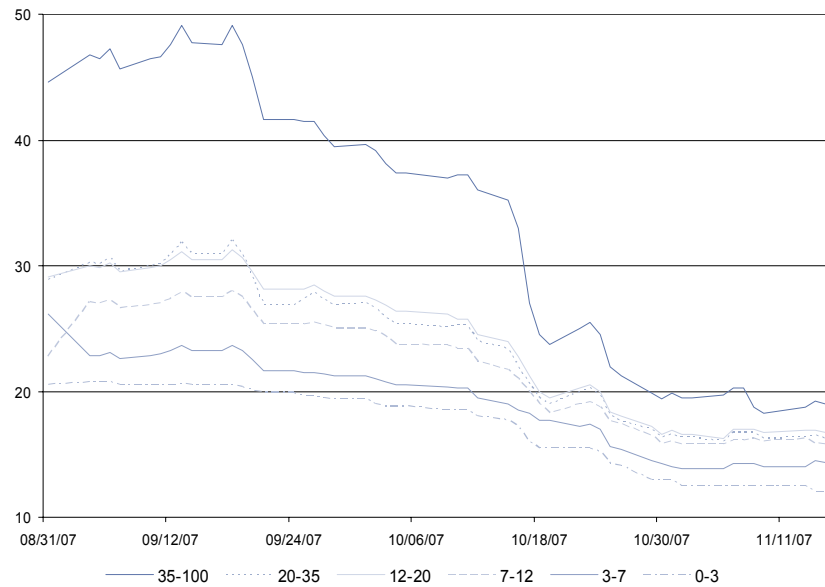
**Exhibit 29: The TABX and ABX have fallen drastically since quarter end with TABX down between 32% - 52% while ABX is down between 17% - 44%**  
data updated through 11/15/2007

TABX							ABX					
Rating	35-100	20-35	12-20	7-12	3-7	0-3	Rating	AAA	AA	A	BBB	BBB--
03/15/07	94	74	58	48	39	31	03/15/07	99	99	94	77	70
09/28/07	40	27	28	25	21	19	09/28/07	95	81	51	32	29
11/15/07	19	16	17	16	14	12	11/15/07	78	47	29	19	19
<b>Returns</b>							<b>Returns</b>					
8-months	(80%)	(78%)	(71%)	(67%)	(63%)	(61%)	8-months	(21%)	(53%)	(69%)	(76%)	(73%)
quarter-to-date	(52%)	(40%)	(39%)	(37%)	(32%)	(38%)	quarter-to-date	(17%)	(42%)	(44%)	(42%)	(37%)

Source: Markit, Goldman Sachs Research.

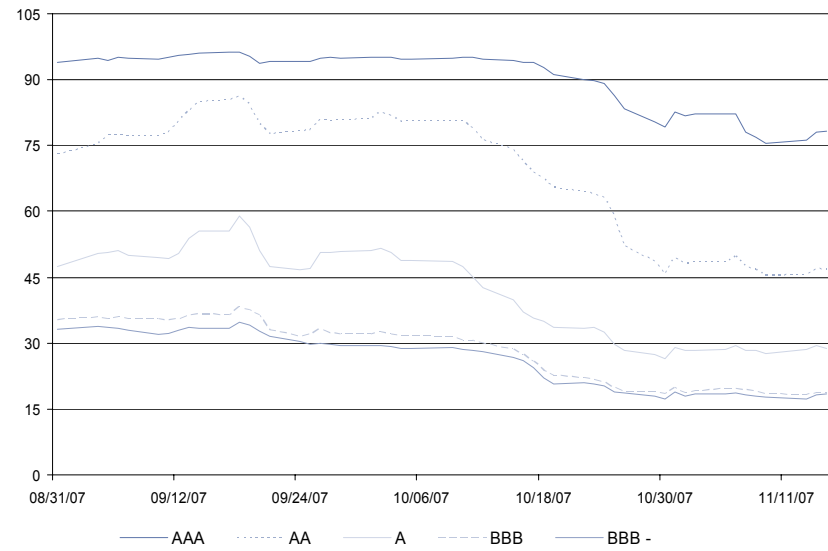
Looking at the ABX, deterioration has been broad based although the most significant declines are coming from the lower rated BBB and BBB- tranches, which have declined 37%-42% respectively since the end of September. Secondly, the TABX index, which we have used as a proxy for CDO assets, has also deteriorated 32-52% across all tranches since the end of September.

**Exhibit 30: TABX has deteriorated by a greater percentage than the ABX across the board since the end of the quarter**



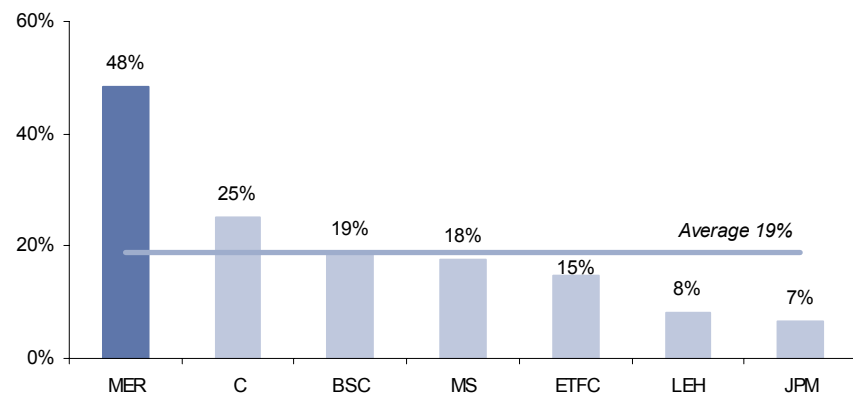
Source: Markit, Goldman Sachs Research.

**Exhibit 31: The ABX is not as bad as the TABX, but has also deteriorated sharply**

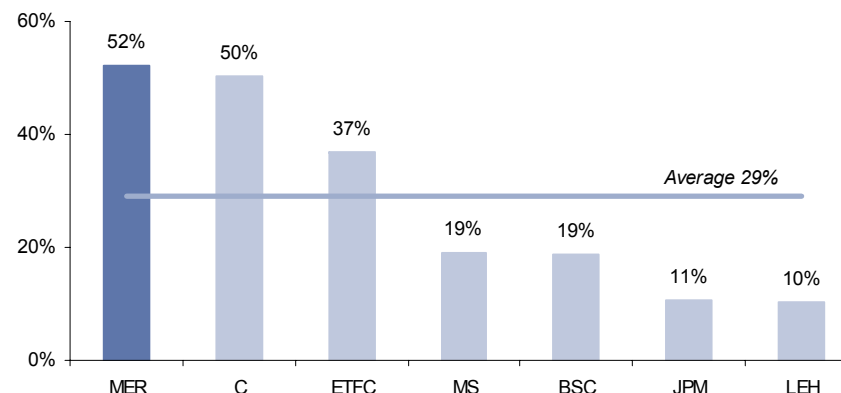


Source: Markit, Goldman Sachs Research.

Deterioration in the TABX index which is a proxy for CDO pricing has been dramatic. Since mid-September the most senior tranche has fallen from close to 50 cents on the dollar to under 20 cents on the dollar currently. Deterioration in the ABX has also been severe as even the AAA tranche is trading below 80 cents on the dollar.

**Exhibit 32: CDO exposure as a % of shareholder equity**

Source: Plot tool.

**Exhibit 33: CDO exposure as a % of tangible equity**

Source: Plot tool.

Citigroup and Merrill Lynch have the most exposure to ABS CDOs as a percentage of shareholders equity and tangible equity when compared with the other firms in our space. Given the deterioration in these markets, this should present some challenges to these firms in coming quarters.

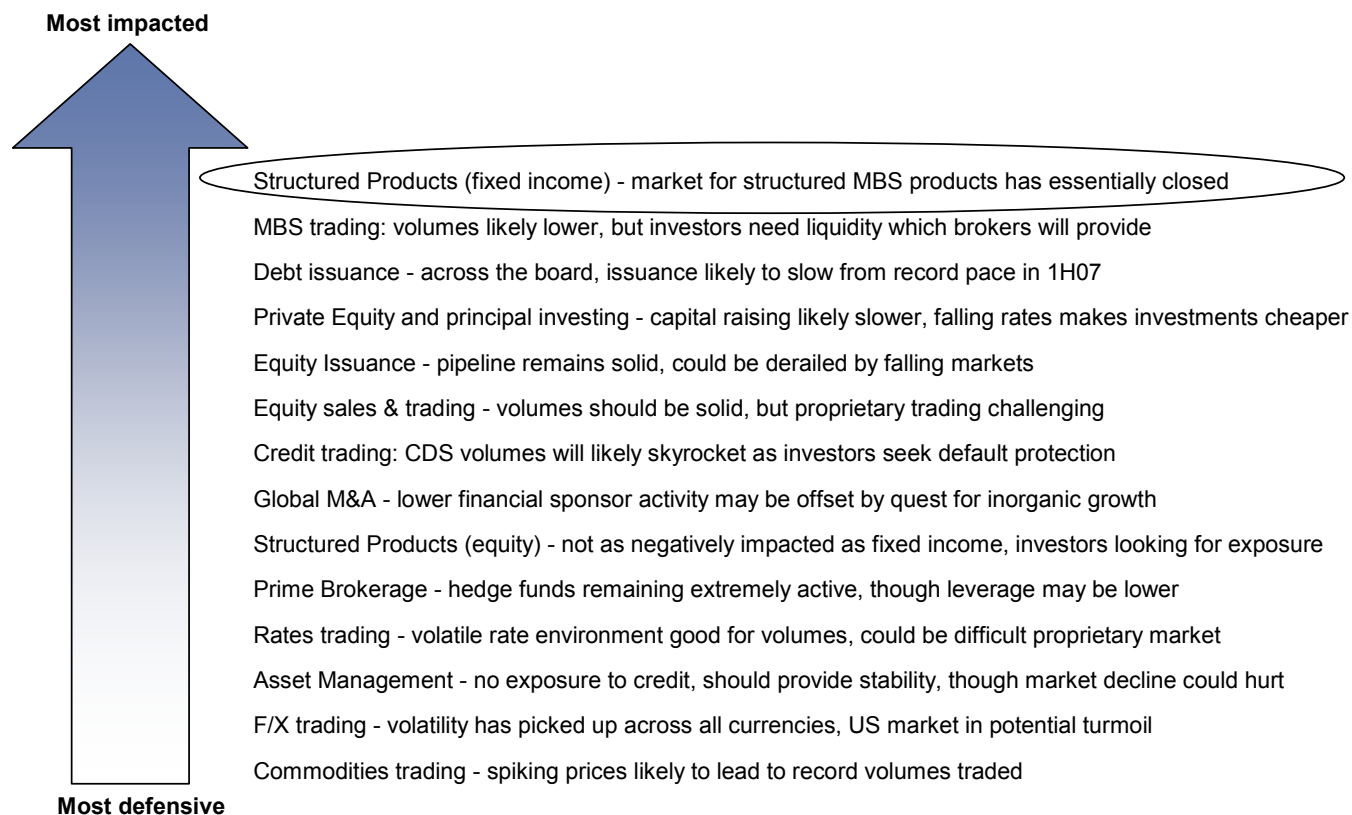
**Exhibit 34: Value at risk (VAR) shows the different firms' approach to risk taking in the different areas of the business**

	C	MER	JPM	MS	BSC	LEH	Universe
Interest Rate	39%	54%	53%	35%	75%	53%	51%
Currency	11%	5%	13%	11%	3%	6%	8%
Equity	38%	23%	19%	29%	16%	35%	27%
Commodity/Energy	12%	17%	15%	25%	6%	6%	14%
Aggregate VaR	100%	100%	100%	100%	100%	100%	100%

Source: Company data, Goldman Sachs Research estimates.

Those businesses with more diversified risk taking approaches are likely to benefit in coming quarters especially those with stronger commodity, foreign exchange and equities platforms. Looking at the firms' VAR (value at risk) enables us to better appreciate the product diversification of Morgan Stanley over others less diversified such as Bear Stearns and Lehman Brothers.

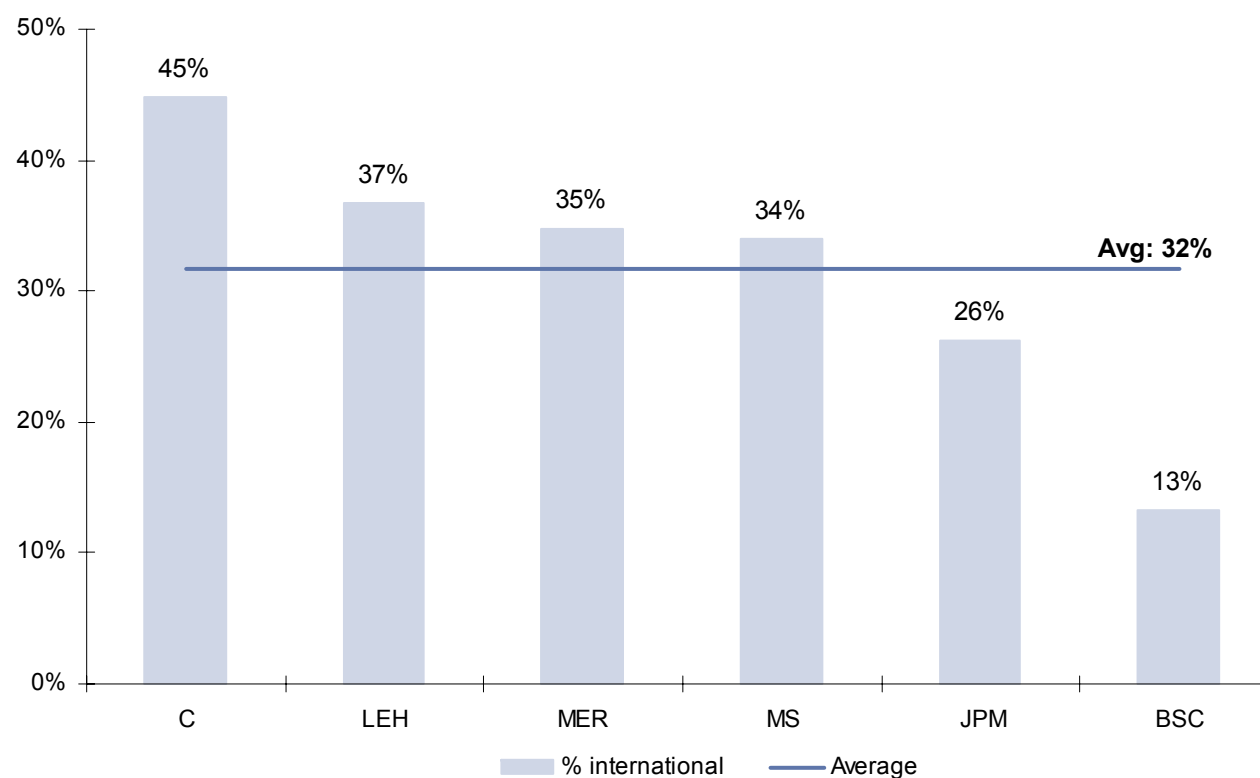
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**Exhibit 35: The most impacted part of the businesses will be Structured Products**



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Source: Goldman Sachs Research estimates.

Two of the major drivers of fixed income trading – structured product and MBS – are unlikely to return to prior levels. These two businesses had been big growth drivers for some. Consequently, fixed income results will be pressured even though many other parts of the fixed income business will be relatively unaffected by the current credit crisis (commodities, F/X and rates).

**Exhibit 36: International revenue diversification also likely to offset some negative headwinds**

Source: Company data, Goldman Sachs Research. Note: based off of full year 2006 revenues.

International revenues will help offset negative headwinds for the brokers. Citigroup will benefit from its global reach, but the negative drivers in its credit business and consumer risk may offset this diversification benefit.

Outside of Citigroup, Lehman has the largest (as a % of net revenue) international franchise of the brokers we cover, which is likely to help it offset potential decelerating revenues from its US mortgage business. Bear Stearns is not only encumbered by a high exposure to the US mortgage market, but it is also has the least benefit from international diversification.

## Implication 2: Raising capital - "the desperate" and "the needy"

### Exhibit 37: Capital raise is essential in the event of stress but comes at a real cost to existing shareholders

\$ in millions

Financial guarantors								
Company	Ticker	Capital raised	Assumed FG losses**	Other income	Price at equity raise***	Current Adj. BVPS	Pro forma Adj. BVPS	Current share price
Ambac	ABK	4,300	2,900	0	\$25	\$88.07	\$38.21	\$28.24
MBIA	MBI	2,900	1,950	0	\$34	\$80.08	\$52.37	\$38.14
Security Capital Assurance*	SCA	3,750	1,875	0	\$5	\$40.86	\$5.89	\$5.96
Assured Guaranty	AGO	10	250	0	\$19	\$37.58	\$33.77	\$21.22

Mortgage insurance								
Company	Ticker	Capital raised	Assumed MI losses****	Other income	Price at equity raise***	Current BVPS	Pro forma BVPS	Current share price
MGIC	MTG	382	2,371	281	\$20	\$49.30	\$26.65	\$22.30
PMI	PMI	345	1,259	-429	\$13	\$43.93	\$20.63	\$13.99
Radian	RDN	1,520	2,521	450	\$11	\$42.86	\$16.75	\$12.60

\*: Security Capital Assurance has not disclosed excess capital levels. For the purposes of conservatism, we assume excess capital levels are zero.

\*\*: We assume the guarantors recognize 50% of the losses immediately. However, in actuality paid claims will materialize as principal and interest comes due.

\*\*\*: We assume a price at equity raise equivalent to a 10% discount to current stock prices.

\*\*\*\*: Mortgage insurance losses reflect losses net of premiums, investment income, expenses and reinsurance over 5 year period.

Source: Goldman Sachs Research estimates, Company filings.

We include the Financial Guarantors (MBI, ABK, SCA, and AGO) and the Mortgage Insurers (PMI, MGI, and RDN) in the "Desperate" category when it comes to the possibility of raising capital.

Our basic premise for both groups is that while the environment is bad and well worse than what consensus estimates may imply, the stocks prices already reflect extreme loss experience. Even assuming severe loss experience and significant capital raises, we still generate equity values inline to above where the stocks are currently trading (making it very difficult to rate the companies a Sell even though there is significant risk embedded in the books).

**Exhibit 38: Marks/loss assumptions embedded in capital analysis**  
claims rates for mortgage insurers as a % of beginning book

Financial guarantors				
Company	Ticker	Assumed mark on mezzanine CDO's	Assumed mark on high grade CDO's	Assumed mark on CDO's of CDO's
Ambac	ABK	50%-75%	20%-30%	75%-95%
MBIA	MBI	50%-75%	20%-30%	75%-95%
Security Capital Assurance	SCA	50%-75%	20%-30%	75%-95%
Assured Guaranty	AGO	30%-50%	10%-15%	75%-95%

Mortgage insurance				
Company	Ticker	Assumed claims rates 2005-2007 prime book	Assumed claims rates 2005-2007 Alt-A book	Assumed claims rates 2005-2007 subprime book
MGIC	MTG	19%	29%	38%
PMI	PMI	19%	29%	38%
Radian	RDN	19%	29%	38%

Source: Goldman Sachs Research estimates.

The core loss assumptions for our pro forma model from above are:

- On the financial guaranty side, we assume actual losses are equivalent to the marks implied by current CDO pricing levels and we assume 50% of losses are recognized immediately. This analysis does not take into consideration alternative sources of capital such as reinsurance, hybrid debt, cash flow from operations, and ability to decelerate growth and/or change the asset mix.
- On the mortgage insurance side, we assume the companies go into run-off mode and they write no additional business (or effectively the returns on new business are nil). We assume PMI has to fully write off FGIC (equivalent to about \$7 per share). We assume across the board that the mortgage insurers can lever up to a 14:1 risk to capital level before having to raise capital. In actuality rating agency requirements will dictate the point at which the insurers need to raise capital.

**Exhibit 39: Financial rating agency risk profile**

## Financial Guarantors

Moody's	Fitch	S&P
<b>HIGH RISK</b>		
CIFG	CIFG FGIC	NA
<b>MODERATE RISK</b>		
Ambac SCA FGIC	Ambac SCA	NA
<b>LOW RISK</b>		
FSA Assured Guaranty Radian MBIA	FSA Assured Guaranty MBIA	NA

Note: reflects rating agency cited probability of each needing capital once current analysis is completed over the next month.

Source: Goldman Sachs Research estimates, Company filings.

**Exhibit 40: Financial rating agency risk profile**

## Mortgage Insurers

Moody's	Fitch	S&P
<b>HIGH RISK</b>		
Radian Triad	Old Republic Radian Triad	
<b>MODERATE RISK</b>		
MGIC Old Republic PMI	MGIC PMI	MGIC Old Republic PMI Radian Triad
<b>LOW RISK</b>		
AIG Genworth	AIG Genworth	AIG Genworth

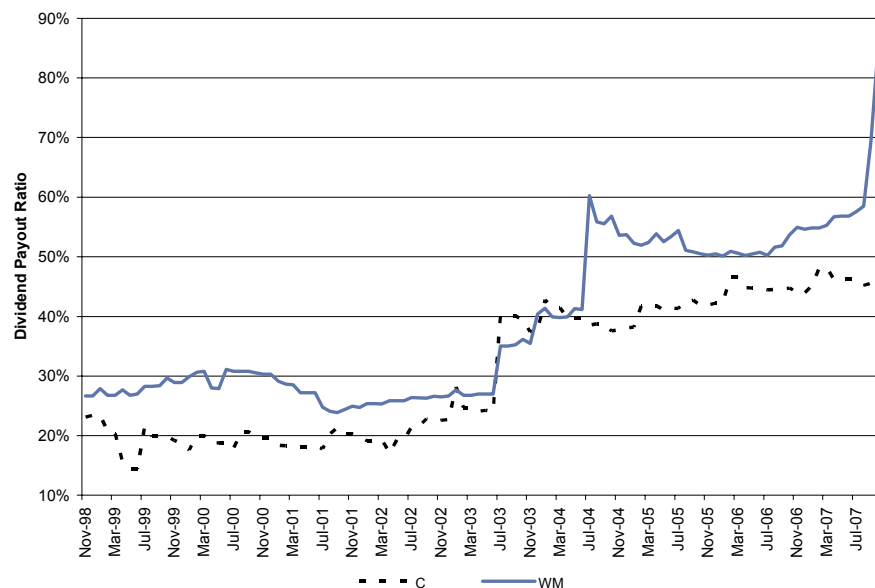
Note: reflects our risk assessment of rating agency downgrades over the near term based on current ratings.

Source: Goldman Sachs Research estimates, Company filings.

We segment rating agency and capital risk into high, moderate and low risk buckets as shown above.

Among the financial guarantors under our coverage we highlight Ambac and Security Capital Assurance as having the most risk of having to raise capital. If ratings agencies downgrade a significant number of securities in the Financials Guarantors insured portfolios, capital raising is likely. Financial guarantors have higher capital charges for lower rated assets.

Among the mortgage insurance companies we cover we would highlight Radian as having the most risk of having to raise capital as Radian has less excess capital and a higher risk book with exposure to second liens and NIM bonds. The driving factor to forced capital raises for the mortgage insurers relates to losses building well worse than current expectations or significant losses building beyond the 2005-2007 vintages.

**Exhibit 41: Payout ratios at unsustainable highs for WaMu**

Source: FactSet, Goldman Sachs Research estimates.

**Exhibit 42: Citi's target capital ratio under pressure**

Risk-weighted assets & Capital Ratios	
<b>Current Tier 1 ratio (3Q2007)</b>	<b>7.3%</b>
3Q2007 ending balance	\$1,261,790
4Q2007 mark to market loss on CDOs (assume 100% impact on RWA)	(11,000)
1Q2008 mark to market loss on CDOs (assume 100% impact on RWA)	(4,000)
<b>2Q2008 ending balance</b>	<b>\$1,246,790</b>
<b>Tier 1 Capital</b>	
3Q2007 ending balance	92,370
4Q2007 change in shareholders equity (net income of (\$2.6 bn) + \$2.7 bn in dividends)	(5,333)
1Q2008 change in shareholders equity (net income of \$2.7 bn + \$2.7 bn in dividends)	82
2Q2008 change in shareholders equity (net income of \$5.1 bn + \$2.7 bn in dividends)	2,455
<b>2Q2008 ending balance</b>	<b>\$89,573</b>
<b>Estimated 2Q2008 Tier 1 Ratio</b>	<b>7.2%</b>
Required tier 1 capital to get to 7.5%	\$93,509
<b>additional tier 1 capital required</b>	<b>\$3,936</b>
current annual dividend	\$10,792
<b>% cut in dividend to reach target Tier 1</b>	<b>36%</b>

Source: Company data, Goldman Sachs Research estimates.

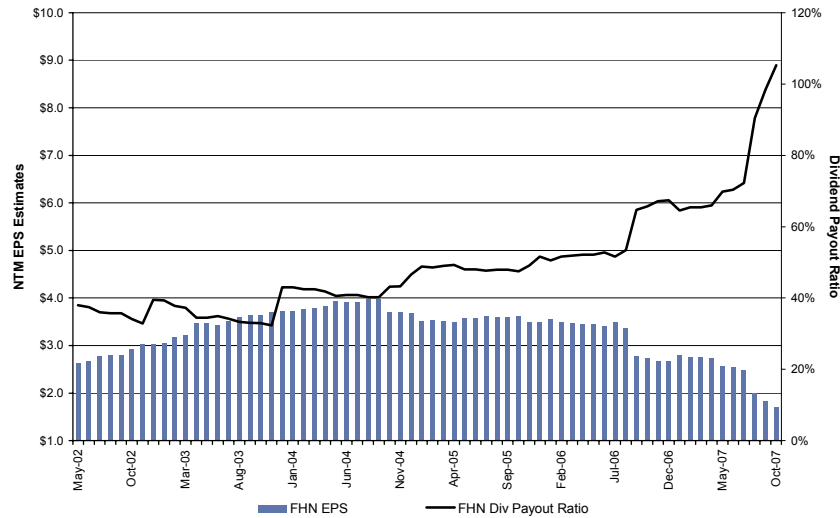
Washington Mutual and Citigroup are both in capital preservation mode and consequently dividend cuts are likely.

Washington Mutual's payout ratio has reached unsustainable levels as earnings have come under pressure amid mortgage losses and rising credit costs. Consequently, the company is likely to cut its dividend in January 2008 in order to preserve capital.

A dividend cut is also likely at Citigroup, in our view. We estimate that the company would need to cut the dividend by about 36% in order to reach its Tier 1 capital goal by 2Q 2008.

**Exhibit 43: First Horizon**

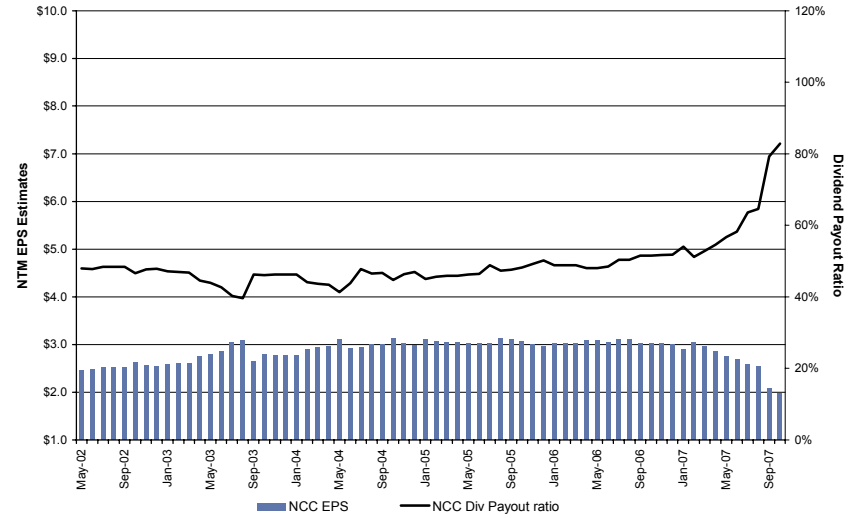
rising payout ratios amidst weaker earnings outlook



Source: FactSet, Goldman Sachs Research.

**Exhibit 44: National City**

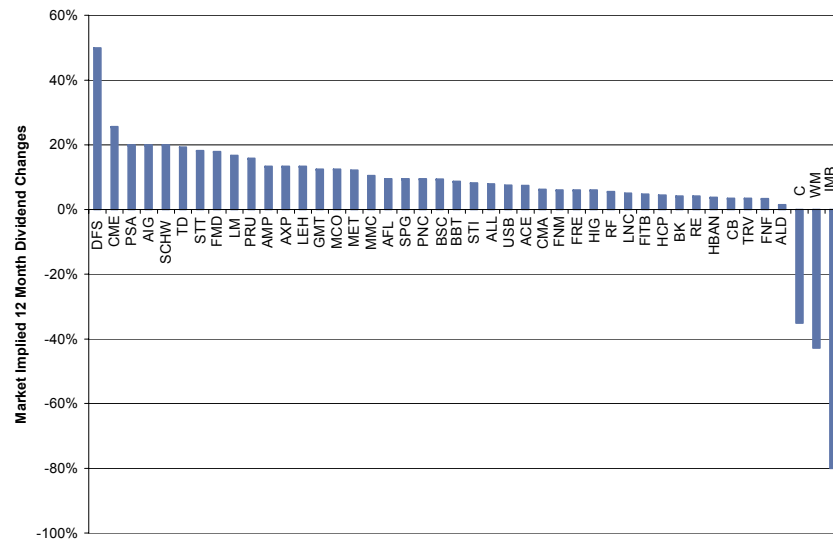
rising payout ratios amidst weaker earnings outlook



Source: FactSet, Goldman Sachs Research.

Some regional banks such as National City and First Horizon also have unsustainably high dividend levels. Some mitigating factors are in place (e.g. NCC owns 4.5% of Visa which is expected to IPO in 2008) and managements are in the process of building capital through reducing loan portfolios. That said, there is clearly some dividend risk.

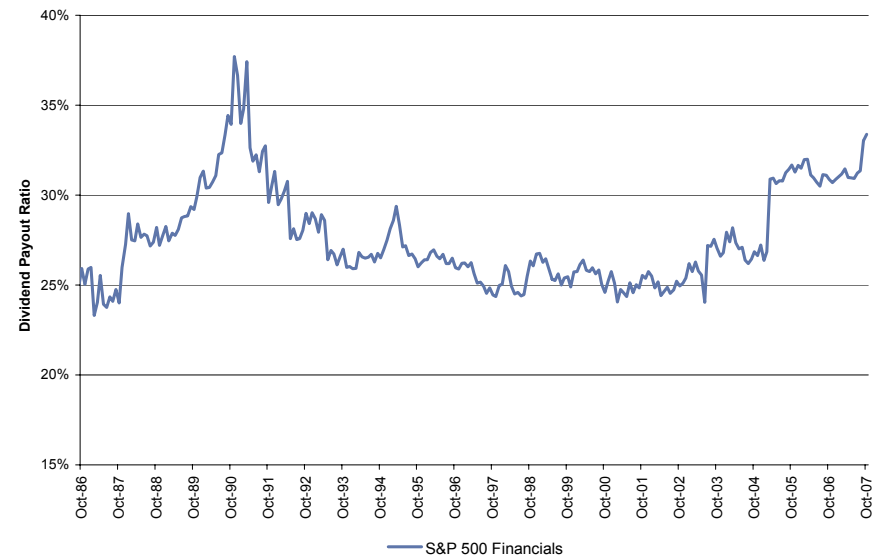
**Exhibit 45: The options market is pricing in dividend cuts at C, WM and IndyMac**



Note: We excluded companies for which the market implied no change.

Source: Goldman Sachs Options Research.

**Exhibit 46: More broadly, payout ratios for Financials in general are moving higher – unfortunately, this reflects shrinking earnings**



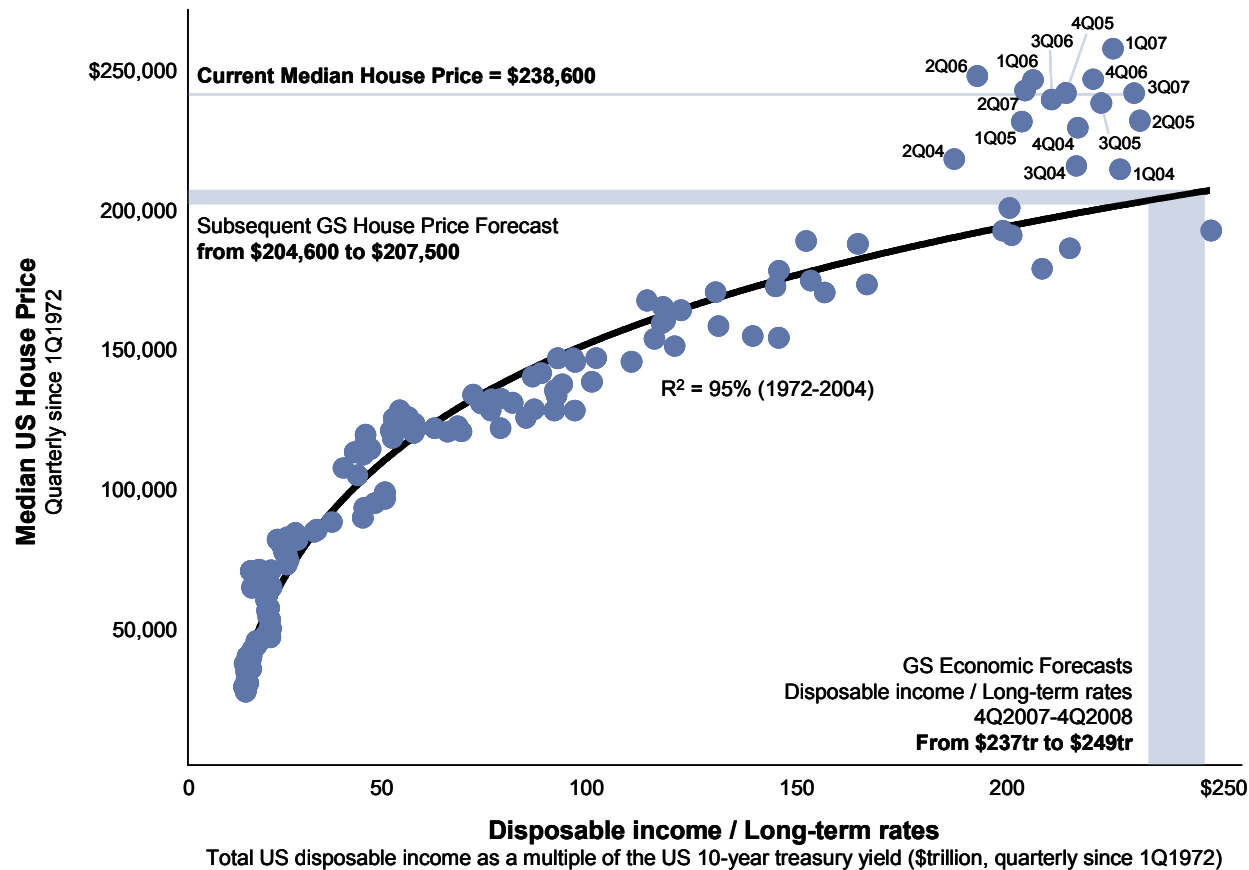
Source: Compustat, Goldman Sachs Research.

The market is pricing in dividend cuts for banks with weak balance sheets. This includes Citigroup, Washington Mutual and IndyMac among banks with liquid options while clearly there is risk of dividend cuts for others as well (e.g. First Horizon).

More broadly, Financials dividend payout ratios are rising to historically high levels as earnings fall. The current average payout ratio is approaching 35%. The last time this was the case was 1990 when the industry was clearly in severe stress as the country headed into recession.

## Implication 3: Some business models are permanently impaired

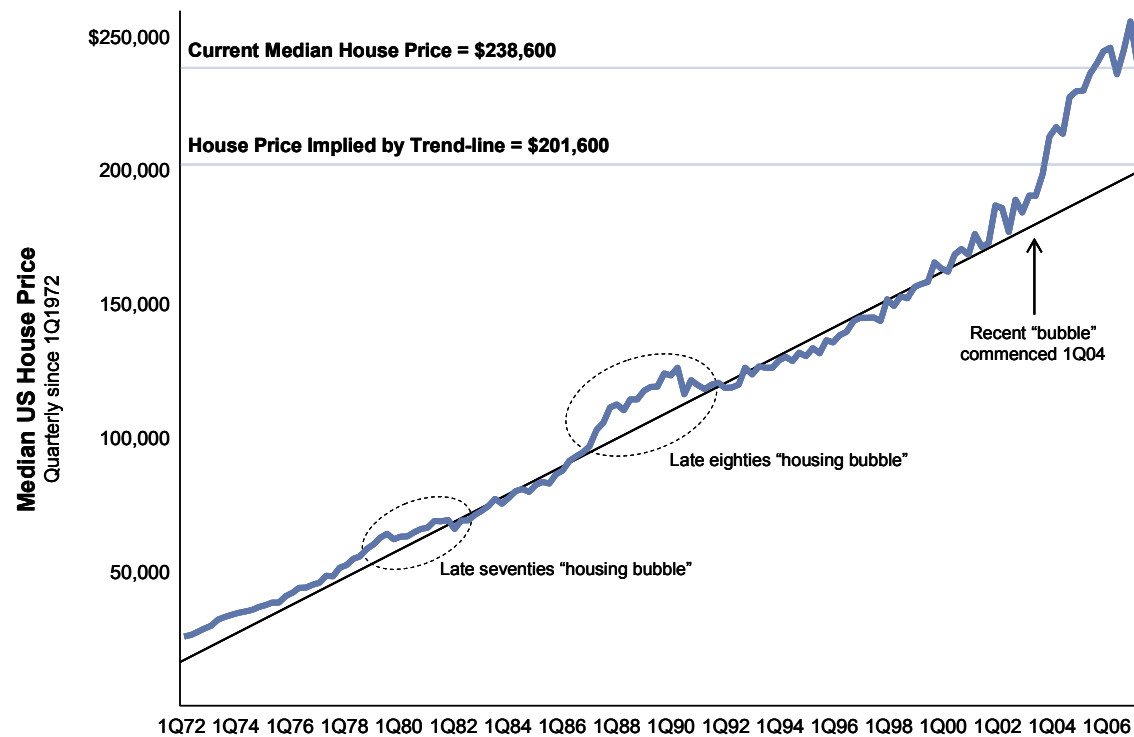
Exhibit 47: House prices are 13%-14% over-valued, relative to current and forecast economic conditions



Source: Census Bureau, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

The fundamental issue is clearly that house prices are overvalued. The median house price in America today (\$239K) is 13%-14% above the level implied by current (and forecast) economic conditions (\$205K-\$208K).

Two economic factors – disposable income and long-term rates – together can explain 95% of the historical variation in US house prices from 1972 through 2004. However, since 2004, house prices have accelerated well-above levels implied by these hitherto predictive economic factors.

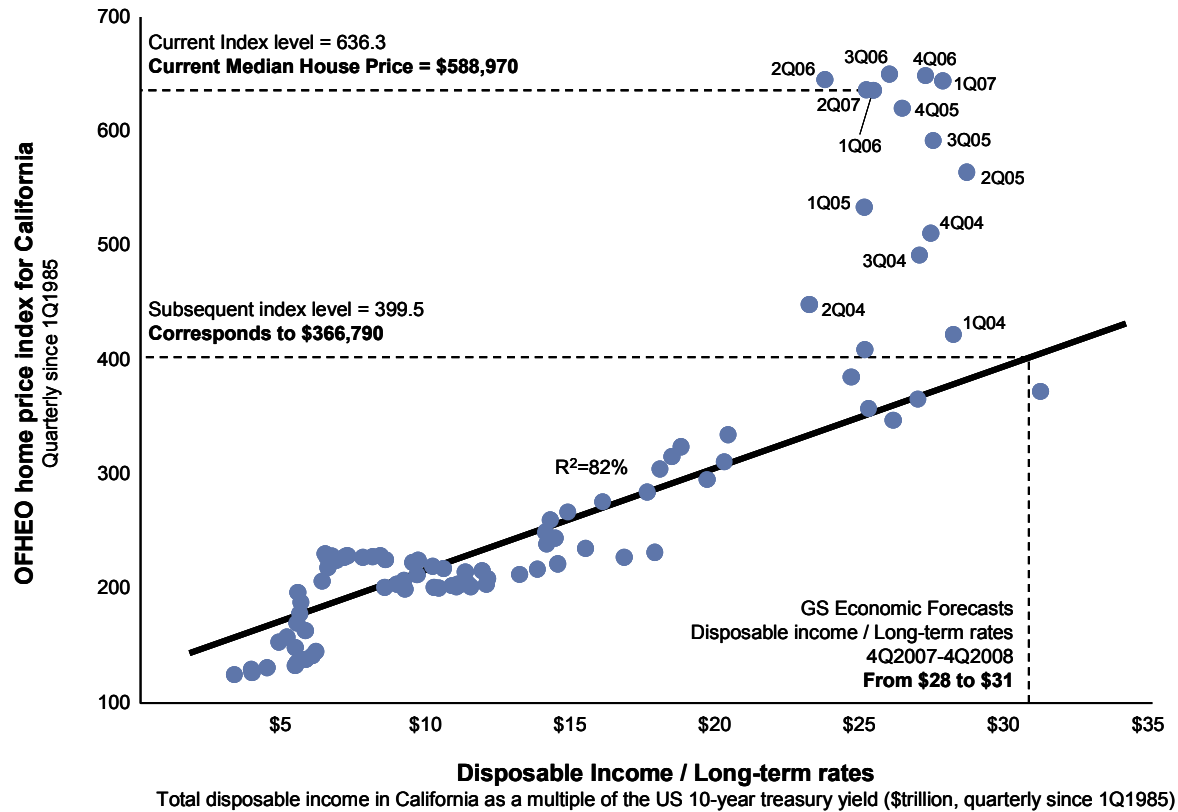
**Exhibit 48: House prices are over-valued, relative to the long-term trend line**

Source: Census Bureau, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

As a check, we compared the current median house price to that implied by a long-term (32-year) trend line; current prices are 18% above the long-term trend. Above-trend house price progression (beginning in 1Q2004) coincided with increased sales of non-traditional mortgage products.

We believe that – just as secondary market demand for these affordability mortgage products drove house price acceleration (from 2004 to 2007) above levels implied by economic factors – the evaporation of such demand (as we have witnessed recently) should encourage house prices to return to a normalized level (i.e. that implied by current and forecast disposable income and long-term rates).

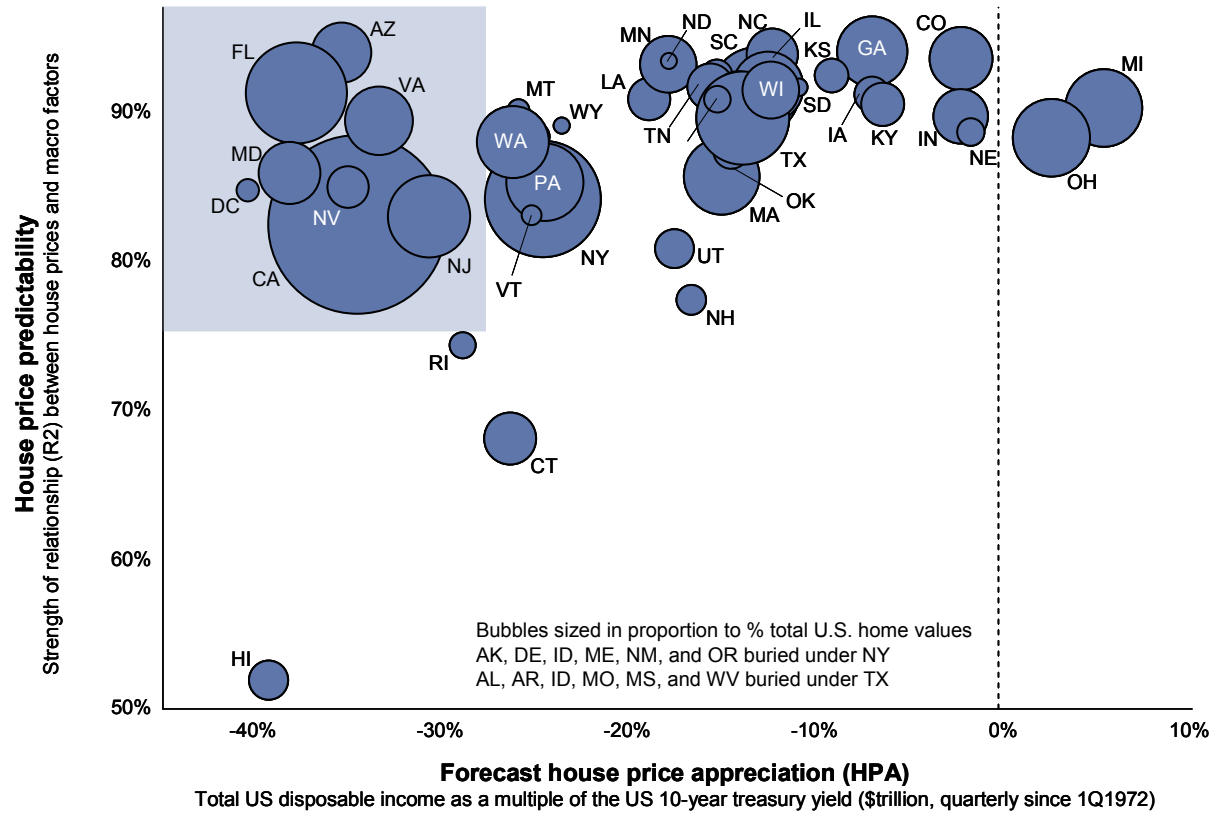
**Exhibit 49: House prices in California are 35%-40% over-valued, relative to forecast economic conditions**



Source: OFHEO, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

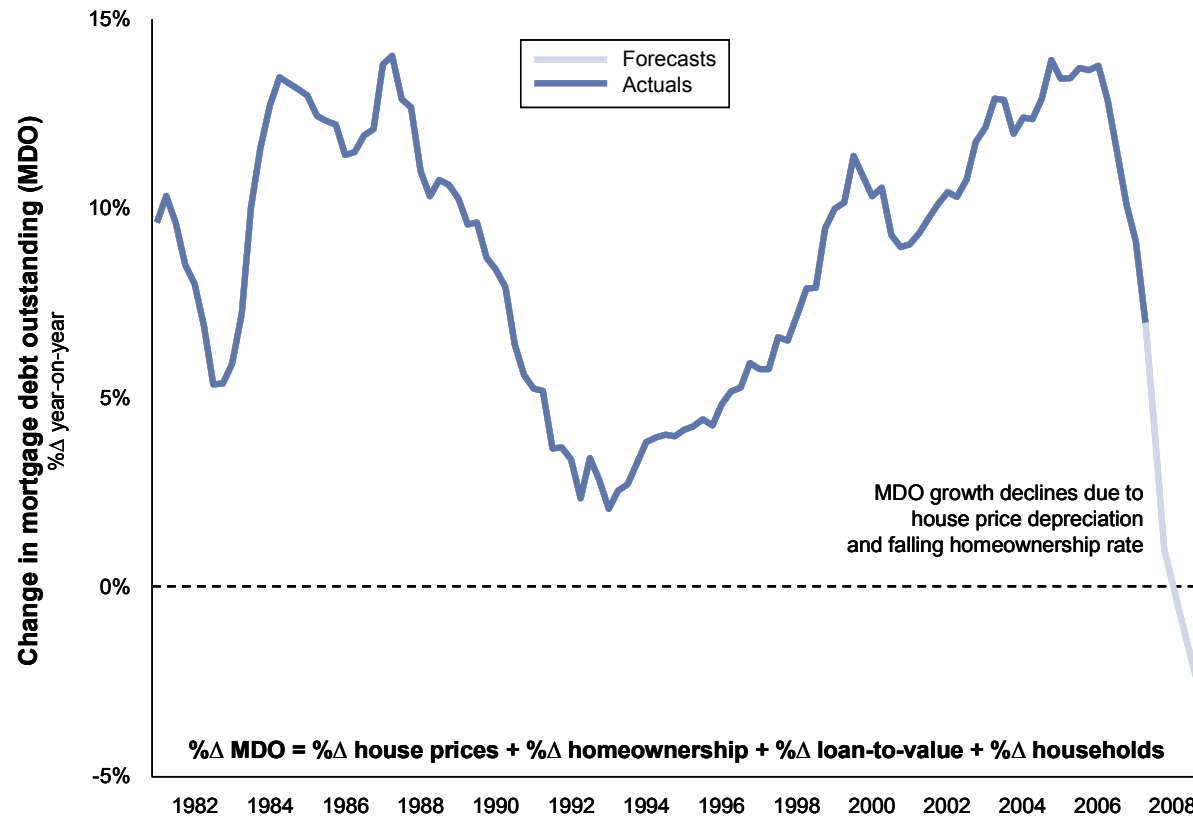
Our forecast for US house price depreciation applies to some states more than others; indeed, real estate value is a very local phenomenon. California is the most extreme example as we estimate home prices are 35-45% over-valued.

**Exhibit 50: Forecast house price appreciation and predictability across states**



Source: OFHEO, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

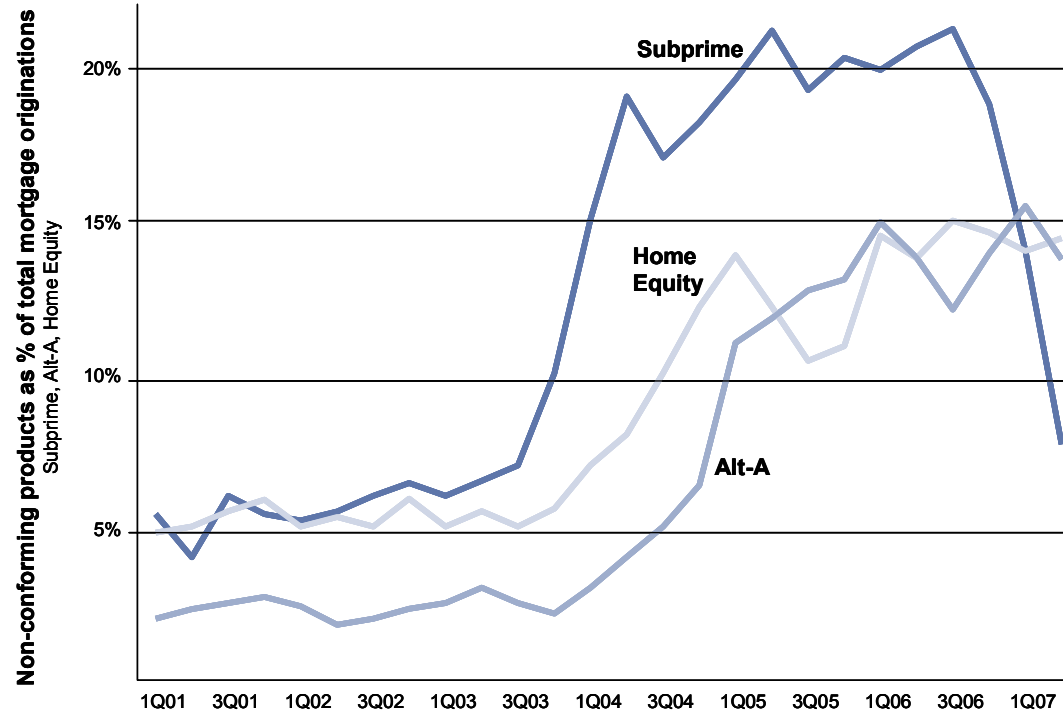
We modeled house prices (historical and forecast). The most worrisome eight states include: California, Florida, Nevada, Arizona, Virginia, New Jersey, Maryland and Washington D.C.

**Exhibit 51: Growth in total US mortgage debt outstanding (MDO) continues to fall**

Source: Mortgage Bankers Association, Census Bureau, FactSet, Goldman Sachs Economic forecasts, Goldman Sachs Research estimates.

Our forecast for house price depreciation of 13%-14% (over three years) and a further decline in the homeownership rate (back to 65%-66%) implies further downside for mortgage debt outstanding (MDO) growth; indeed, we project negative year-on-year growth in MDO during some quarters next year.

**Exhibit 52: Non-conforming loans spiked as a proportion of total mortgage originations in 2004; we believe the sharp reversal in 2007 may be permanent.**



Source: Mortgage Bankers Association, Census Bureau, Goldman Sachs Research estimates.

Subprime mortgage will never again be what it was in the bubble. In 2004, subprime, Alt-A, and home equity loans spiked as a proportion of total mortgage originations; but this trend has recently reversed, with non-conforming loans falling sharply.

**Exhibit 53: Two key aspects of proposed mortgage legislation**

The Mortgage Reform and Anti-predatory Lending Act of 2007

Section	Legal wording	GS interpretation
Sec. 103. ANTI-STEERING	“No mortgage originator may receive from any person, and no person may pay to any mortgage originator, directly or indirectly, any incentive compensation (including yield spread premium) that is based on, or varies with, the terms of any residential mortgage loan.”	Sales commission rates would be standardized among different types of mortgage products, to prevent incentives to brokers selling riskier products to borrowers.
Sec. 204. SECURITIZER LIABILITY	“...a civil action which may be maintained against a creditor with respect to a residential mortgage loan... may be maintained against an assignee, including a securitizer, of such residential mortgage loan, acting in good faith, for the following liabilities...”	Secondary market participants would be liable for the non-conforming underwriting standards practiced by mortgage lenders.

Source: Housing Financial Services Committee, Goldman Sachs Research.

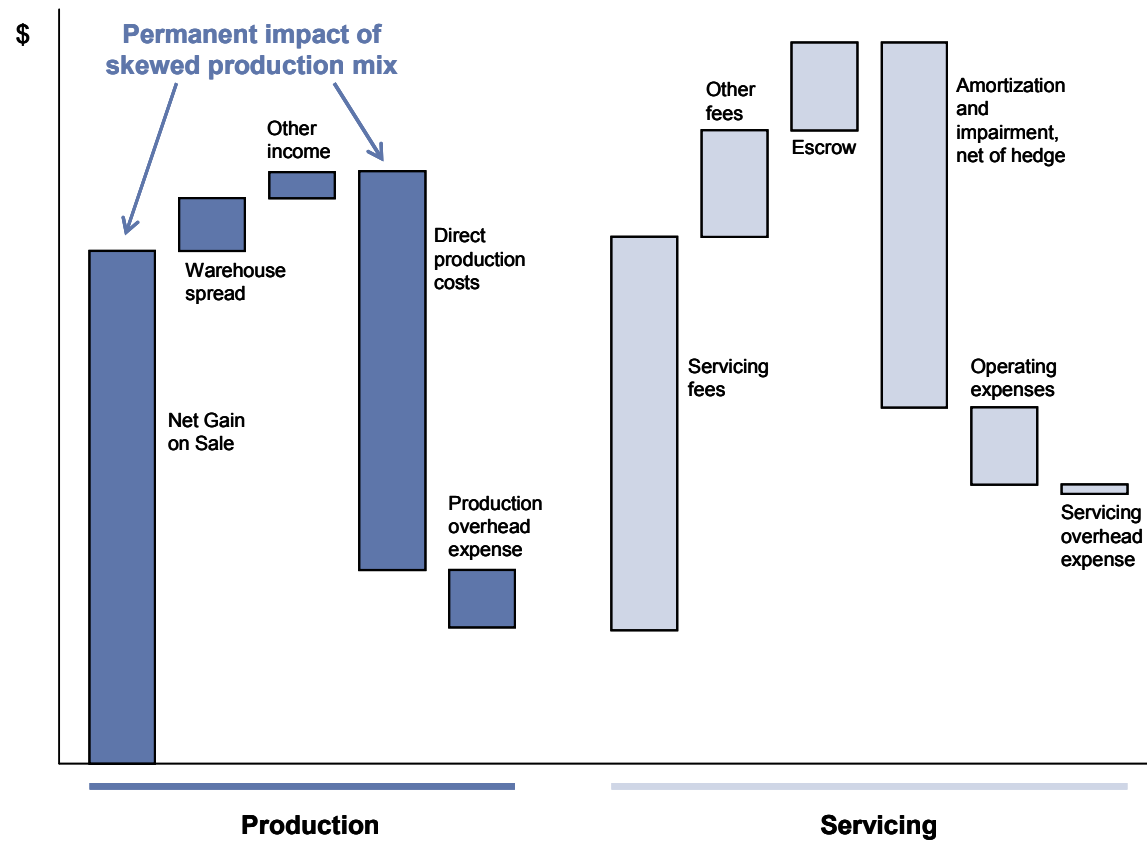
We believe the decline of subprime and Alt-A loans may be permanent, especially given new proposed legislation.

The Mortgage Reform and Anti-predatory Lending Act of 2007 proposes "anti-steering" and "securitizer liability" which, together, would seal the fate for subprime. If passed, these initiatives would curtail gain on sale margins and production volumes significantly.

Investor demand may be permanently impaired for higher risk loans.

**Exhibit 54: The mortgage lending business model**

pressure on net gain on sale and production costs from permanent skew of mix towards conforming loans

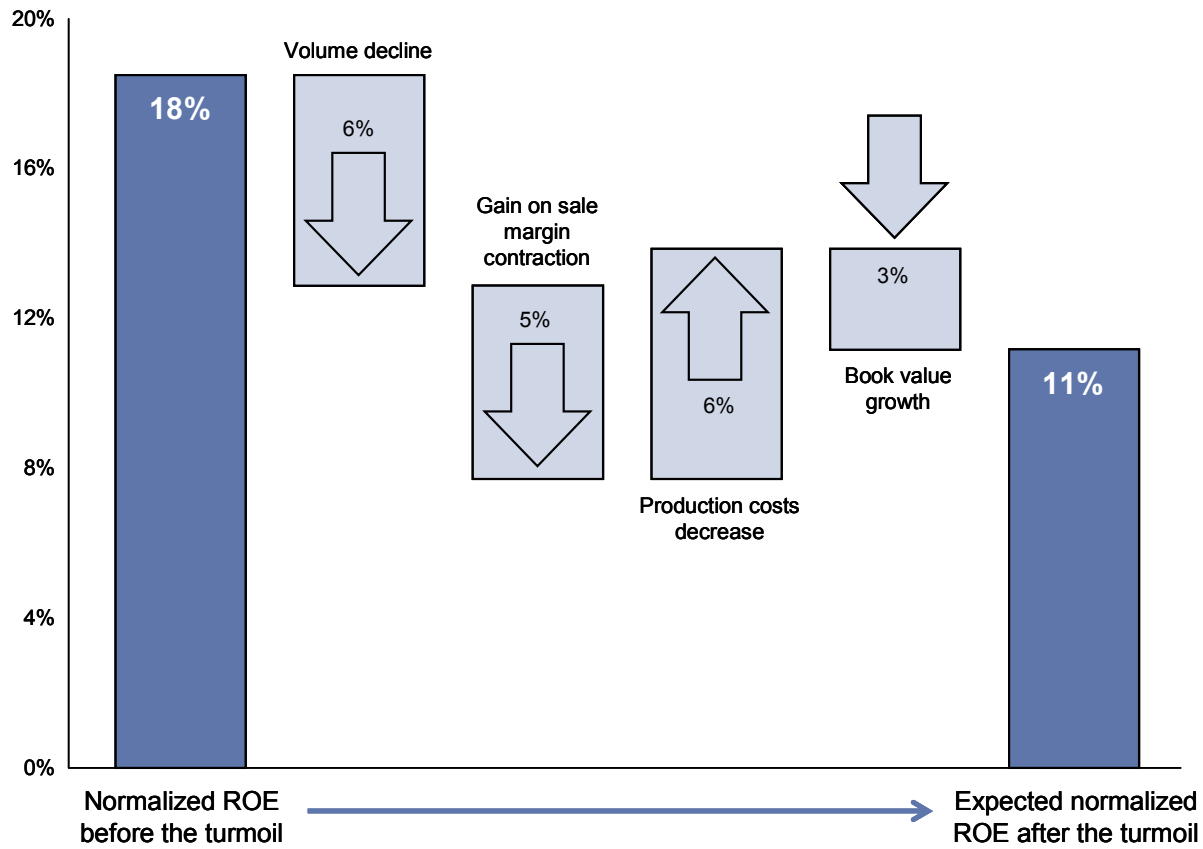


Source: Company data, Goldman Sachs Research estimates.

Mortgage production profitability is extremely dependent on two factors: 1) gain on sale revenues and 2) production costs.

As the mortgage market (likely permanently) moves away from non-conforming subprime and Alt-A loans (which clearly carried higher yields), volumes and gain on sale margins will be reduced to a greater extent than costs can come down.

**Exhibit 55: Ultimate consequences of a permanently-skewed production mix**  
 normalized ROE for CFC to fall from 18% to 11%

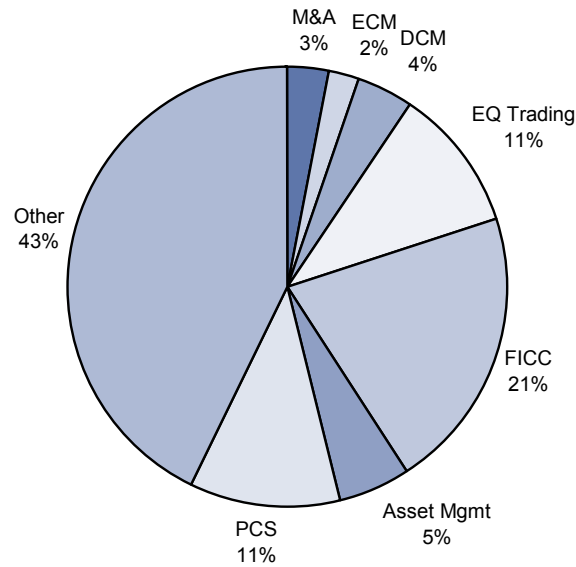


Source: Company data data, Goldman Sachs Research estimates.

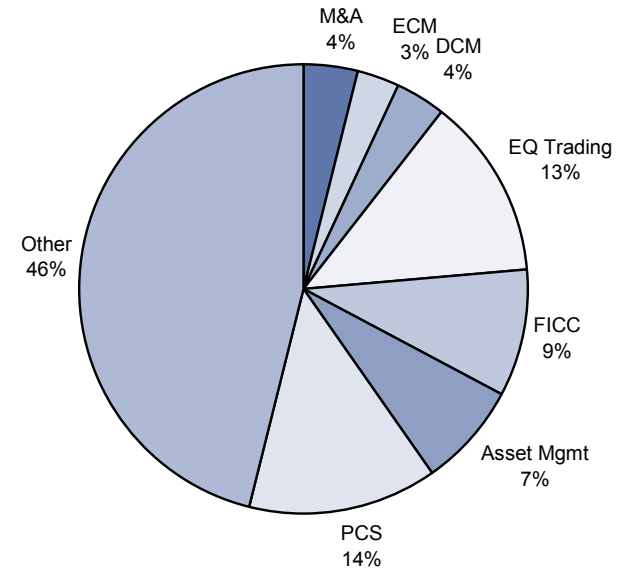
As both origination volumes and gain on sale margins come down, returns for mortgage lenders will be cut in half. Some investment banks may exit the mortgage business.

**Exhibit 56: Industry FICC revenues will be under pressure as mortgage driven revenues (subprime MBS, CDOs) shrink**  
 industry revenues for US brokers

**Total 2006 industry revenue: \$243 BN**



**Total 2008E industry revenue: \$269 BN**



Source: Company data, Goldman Sachs Research.

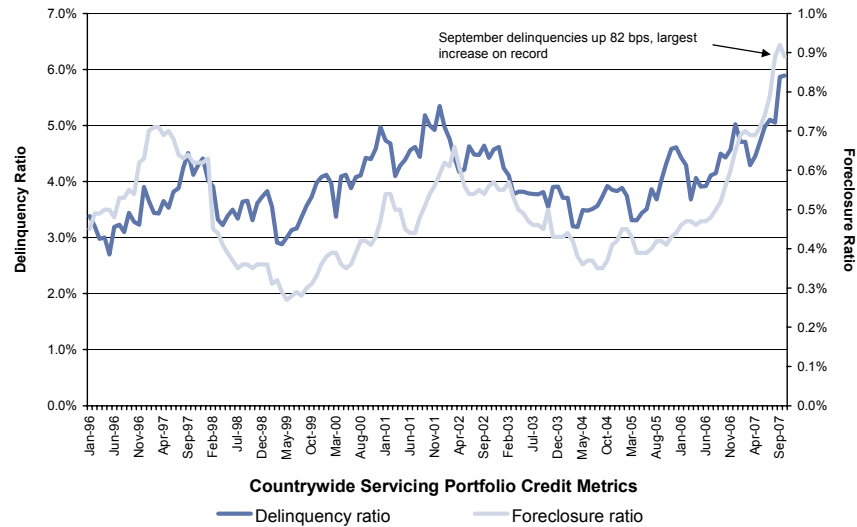
Fixed income makes up over one-fifth of group revenues for the investment banks in our coverage universe. We estimate that this could shrink to under 10% in 2008. Mortgage driven revenues will be under the most pressure including subprime MBS and subprime CDOs. Investors' appetite for credit risk has been significantly reduced.

Consequently, the vertically integrated mortgage model will be impaired. The vertically-integrated mortgage business contributes meaningfully to fixed income revenues (e.g., approximately 10% at Morgan Stanley, but up to 45% at Bear Stearns).

# Implication 4: Broader consumer credit deterioration

**Exhibit 57: Mortgage – greater than recessionary loss levels without a recession**

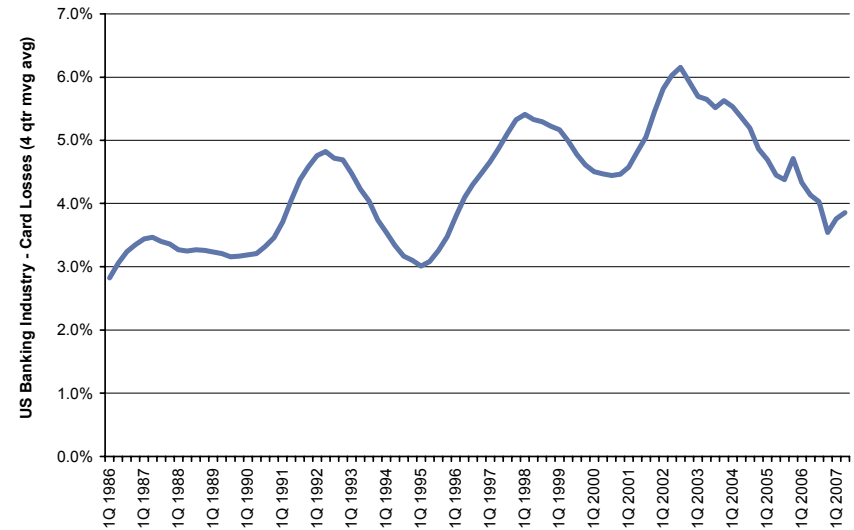
CFC servicing portfolio credit metrics (10% of total US mortgages)



Source: Federal Reserve, Goldman Sachs Research.

**Exhibit 58: Until now, consumer (ex-mortgage) had remained relatively insulated**

consumer net charge-off ratio, US Banking industry



Source: Federal Reserve, Goldman Sachs Research.

Mortgage has clearly been a crisis as delinquencies and foreclosures are at all times high. Until recently, however, mortgage issues had seemed fairly well contained. For example, consumer losses for the US Banking industry in the first half of 2007 were very low.

**Exhibit 59: 1/3 of the country is in or near recession – based both on unemployment indicators and home price indicators**

note: our GS Economist estimates that a &gt;60bps increase in unemployment is historically a strong indicator of state level recessions

**EMPLOYMENT SCREEN: % of US that is likely in or nearing a recession**

	- Unemployment Rate -		Change in Unemployment	State as % of US GDP	yoy Home Price Decline
	Jan 07	Sep 07			
<b>High Risk States</b>					
Illinois	4.2%	5.2%	100 bps	4%	1%
California	4.8%	5.5%	70 bps	13%	-10%
Florida	3.3%	4.0%	67 bps	5%	-6%
Nevada	4.4%	5.0%	63 bps	1%	-8%
<b>States which never recovered from the last recession</b>					
Michigan	7.1%	7.4%	30 bps	3%	-5%
Ohio	5.5%	5.8%	33 bps	4%	-2%

High Risk or In a Recession -> **30.4%****HOME PRICE SCREEN: % of US that is likely in or nearing a recession**

	- Unemployment Rate -		Change in Unemployment	State as % of US GDP	yoy Home Price Decline
	Jan 07	Sep 07			
California	4.8%	5.5%	70 bps	13%	-9.9%
Nevada	4.4%	5.0%	63 bps	1%	-7.9%
Louisiana	4.1%	4.0%	-3 bps	1%	-7.7%
Florida	3.3%	4.0%	67 bps	5%	-6.0%
Arizona	4.1%	3.6%	-57 bps	2%	-6.0%
Michigan	7.1%	7.4%	30 bps	3%	-5.0%
Rhode Island	5.0%	5.0%	3 bps	0%	-4.7%
Virginia	2.9%	3.0%	13 bps	3%	-4.2%
District of Columbia	6.1%	5.7%	-47 bps	1%	-4.2%
Massachusetts	5.2%	4.7%	-57 bps	3%	-4.1%

High Risk or In a Recession -> **32.0%**

Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Loanperformance, Goldman Sachs Research. Unemployment and home price data are three month moving averages.

Unemployment is rising in several key states, most notably California. Consequently, 1/3 of the country appears to be in or near recession. Card and auto lenders are starting to feel the fallout of falling home prices.

**Exhibit 60: The mortgage crisis is now causing strain in card and auto; card losses fine so far but delinquencies rising; auto deteriorating**

net charge-off and delinquency data for credit card and auto loans

	Managed Credit Card Losses											qoq Δ
	1Q 05	2Q 05	3Q 05	4Q 05	1Q 06	2Q 06	3Q 06	4Q 06	1Q07	2Q07	3Q07	
Capital One (a)	4.73%	4.90%	4.68%	5.70%	2.93%	3.29%	3.39%	3.82%	3.99%	3.73% (a)	4.13%	+40 bps
JPMorgan Chase	4.83%	4.87%	4.70%	6.39%	2.99%	3.28%	3.58%	3.45%	3.57%	3.62%	3.64%	+2 bps
WaMu/Providian	na	na	na	7.28%	5.79%	5.99%	5.68%	5.84%	6.31%	6.49%	6.37%	-12 bps
Citigroup	5.58%	5.80%	5.66%	6.68%	3.90%	4.11%	4.26%	4.35%	4.63%	4.55%	4.41%	-14 bps
Bank of America	5.06%	5.20%	4.79%	7.07%	3.07%	3.55%	4.18%	4.57%	4.81%	5.20%	4.86%	-34 bps
US Bancorp	4.11%	3.93%	3.74%	4.20%	2.62%	2.72%	1.59%	2.88%	3.48%	3.56%	3.09%	-47 bps
<b>Average</b>	<b>4.86%</b>	<b>4.94%</b>	<b>4.71%</b>	<b>6.22%</b>	<b>3.55%</b>	<b>3.82%</b>	<b>3.78%</b>	<b>4.15%</b>	<b>4.47%</b>	<b>4.53%</b>	<b>4.42%</b>	<b>-11 bps</b>

(a) We estimate a core 4.10% loss rate in 2Q07 excluding one time items.

	Card Delinquency (30+ dpd except for Citi)					qoq Δ
	3Q 06	4Q 06	1Q07	2Q07	3Q07	
Capital One	3.53%	3.74%	3.48%	3.41%	4.46%	31%
WaMu	5.53%	5.25%	5.15%	5.11%	5.73%	12%
Citigroup (a)	1.60%	1.62%	1.57%	1.47%	1.60%	9%
JPMorgan Chase	3.17%	3.13%	3.07%	3.00%	3.25%	8%
Bank of America	5.14%	5.49%	5.44%	5.24%	5.44%	4%
<b>Average</b>	<b>3.79%</b>	<b>3.85%</b>	<b>3.74%</b>	<b>3.65%</b>	<b>4.10%</b>	<b>13%</b>

(a) Citi only reports a 90+ day delinquency ratio in GAAP reporting.

Bank of America data for both losses and delinquencies is US consumer and business card.

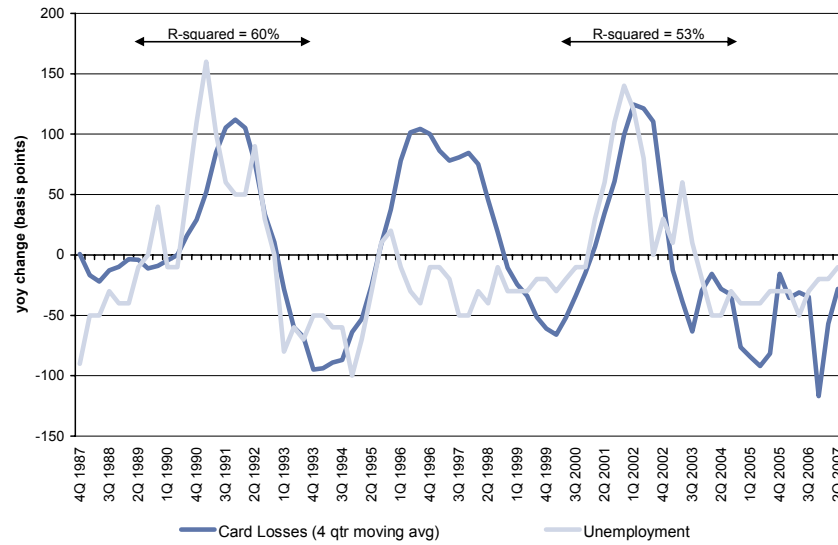
Auto	Auto Losses											yoy Δ
	1Q 05	2Q 05	3Q 05	4Q 05	1Q 06	2Q 06	3Q 06	4Q 06	1Q 07	2Q 07	3Q 07	
Huntington	0.56%	0.33%	0.62%	0.61%	0.62%	0.28%	0.40%	0.54%	0.52%	0.45%	0.73%	83%
Capital One	2.89%	1.74%	2.5%	3.32%	2.35%	1.54%	2.34%	2.85%	2.29%	2.35%	3.56%	52%
JP Morgan Chase	0.60%	0.37%	0.56%	0.66%	0.46%	0.43%	0.64%	0.75%	0.59%	0.61%	0.97%	52%
Fifth Third	nd	nd	nd	nd	0.55%	0.42%	0.63%	0.76%	0.61%	0.58%	0.91%	44%
Citigroup	4.17%	2.81%	3.70%	3.74%	3.29%	2.44%	3.08%	3.92%	3.40%	2.23%	3.06%	-1%
<b>Average</b>	<b>2.06%</b>	<b>1.31%</b>	<b>1.86%</b>	<b>2.08%</b>	<b>1.68%</b>	<b>1.17%</b>	<b>1.62%</b>	<b>2.02%</b>	<b>1.70%</b>	<b>1.41%</b>	<b>2.08%</b>	<b>29%</b>

Note: Auto exhibits seasonality (losses always are lowest in 2Q, highest in 4Q). Consequently, we focus on yoy trends.

Source: Company data, Goldman Sachs Research.

With the mortgage crisis now spreading into a regional employment issue, we are seeing strain in credit card and auto. Specifically, card delinquencies are rising while auto losses are increasing as well.

**Exhibit 61: Unemployment has a big impact on cards**  
 yoy change in unemployment vs. yoy change in card losses



Source: Federal Reserve, Goldman Sachs Research.

**Exhibit 62: Card losses can rise notably (to 6-7% historically vs. 5% now)**  
 loss rates for diversified card issuers vs. subprime issuers



Source: Fitch, Goldman Sachs Research.

Historically, when unemployment has turned there has been a 1 to 1 relationship between rising unemployment and increasing card losses. Card losses peaked in the 6% to 7% range in the last two cycles.

**Exhibit 63: Rising losses will pressure earnings, most notably for less diversified lenders**

EPS sensitivity to losses rising 10% further than expected in card and auto

	Managed Loans (\$bn)	% subprime	2008E Loss Ratio	Net Charge Offs (\$bn)	Stress Test - Losses +10% vs. Forecast	EPS Impact: Stress Test vs. Current Forecast	% of 2008 EPS
ACF	16.4	80%	5.20%	0.9	5.72%	-\$0.49	-23%
DFS	54.0	28%	5.00%	2.7	5.50%	-\$0.37	-29%
COF (COF+Auto)	25.7	31%	3.50%	0.9	3.85%	-\$0.70	-9%
WM	29.0	50%+	7.00%	1.9	7.70%	-\$0.14	-7%
AXP	82.3	17%	4.50%	3.7	4.95%	-\$0.21	-6%
BAC	162.0	25%	5.50%	8.9	6.05%	-\$0.13	-3%
JPM	151.5	18%	3.90%	5.9	4.29%	-\$0.11	-2%
C	145.9	25%	4.90%	7.1	5.39%	-\$0.09	-2%
						<b>Median</b>	<b>-7%</b>
<i>Note: COF Auto vs. Card</i>							
COF (Auto)	25.7	33%	3.50%	0.9	3.85%	-\$0.16	-2%
COF (Card)	50.3	30%	6.00%	3.0	6.60%	-\$0.54	-7%

Source: Company data, Goldman Sachs Research.

Less diversified lenders will be hit hardest by rising losses. We see potential for estimates to move 18-22% lower for ACF and DFS.

**Exhibit 64: We forecast that reserves will build to about 1.18% for the sector in 2008 vs. our estimate of 1.20% "mid-cycle" reserve levels and the current 1.09%; many banks' reserves will be above mid-cycle levels given real estate deterioration**

Company	Reserve to Loan Ratio						% of 2008 EPS
	Late 1990s	3Q 07	Current GS Estimate for 2008	2009E	Next mid-cycle estimate	3Q07 vs mid-cycle estimate	
U.S. Bancorp	1.54%	1.37%	1.31%	1.25%	1.25%	-12 bps	2%
City National	2.72%	1.36%	1.22%	1.13%	1.29%	-7 bps	2%
PNC	1.15%	1.09%	1.13%	1.14%	1.09%	0 bps	0%
Fifth Third	1.44%	1.08%	1.16%	1.18%	1.11%	3 bps	-1%
National City	1.56%	1.23%	1.37%	1.51%	1.26%	4 bps	-2%
BB&T	1.35%	1.04%	1.12%	1.20%	1.11%	7 bps	-2%
Zions	1.75%	1.11%	1.25%	1.35%	1.16%	6 bps	-2%
Huntington	1.45%	1.14%	1.20%	1.23%	1.19%	5 bps	-2%
SunTrust	1.37%	0.91%	1.09%	1.19%	0.98%	8 bps	-3%
KeyCorp	1.45%	1.29%	1.29%	1.29%	1.39%	9 bps	-4%
Marshall & Ilsley	1.50%	1.01%	1.04%	1.11%	1.14%	13 bps	-4%
Bank of America	1.85%	1.20%	1.38%	1.43%	1.38%	17 bps	-4%
Wachovia	1.28%	0.78%	1.12%	1.20%	1.03%	25 bps	-7%
Comerica	1.45%	1.03%	1.07%	1.12%	1.21%	18 bps	-8%
Wells Fargo	2.30%	1.06%	1.16%	1.25%	1.43%	38 bps	-9%
First Horizon	1.11%	1.08%	1.35%	1.42%	1.30%	22 bps	-14%
<b>Median</b>	<b>1.45%</b>	<b>1.09%</b>	<b>1.18%</b>	<b>1.25%</b>	<b>1.20%</b>	<b>7 bps</b>	<b>-3%</b>

Note: We have increased our mid-cycle estimate of reserves for First Horizon and Wachovia relative to our May 21, 2007 report to reflect increased risk in real estate portfolios.

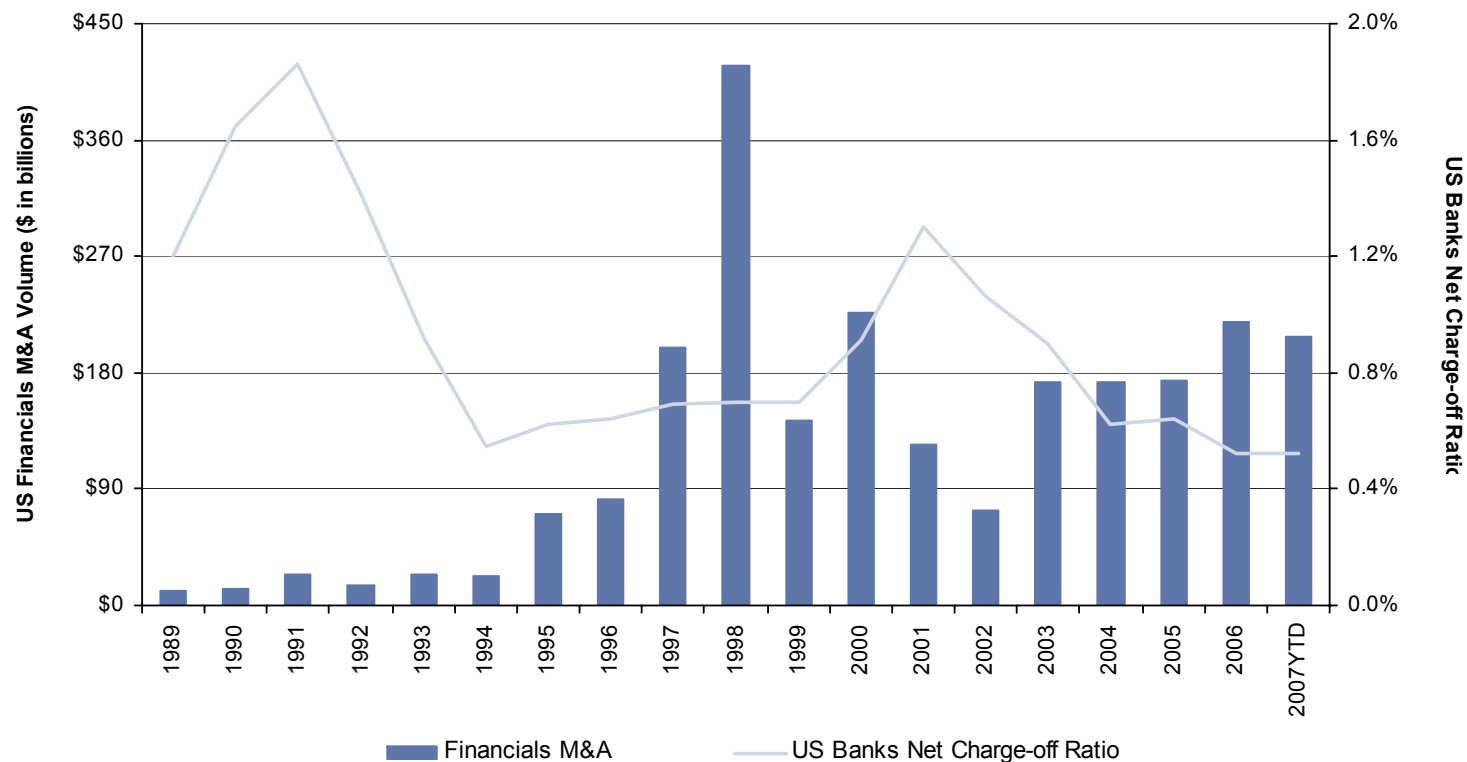
Source: Company data, Goldman Sachs Research.

For banks, credit will be an earnings headwind as reserves build.

## Implication 5: A consolidation wave is coming, but not yet

### Exhibit 65: Consolidation waves have historically been most pronounced when credit is improving or stable, not when credit is deteriorating

financials services announced M&A deal volume versus US Banks net charge-off ratios

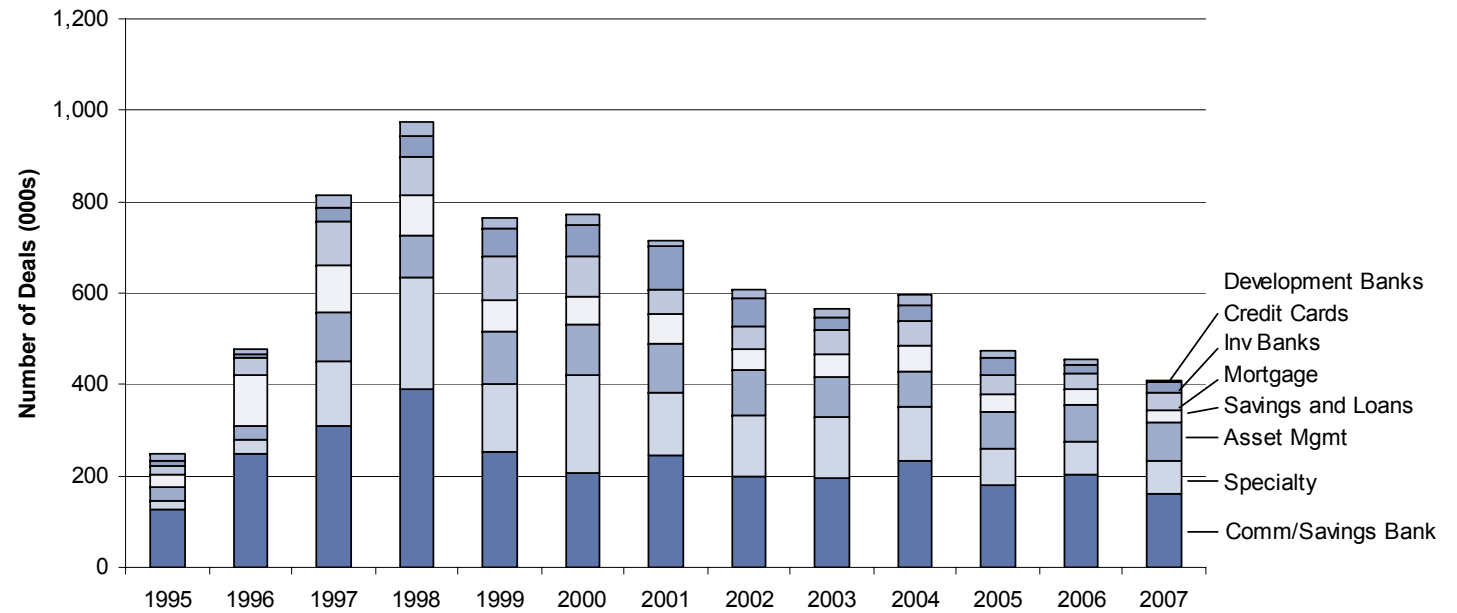


Source: SNL, Goldman Sachs Research. Note: Includes Banks & Thrifts; Specialty Finance; Securities & Investments; Other Fin'l Svcs; Insurance; Insurance Broker; Other Insurance.

US Financial M&A has peaked in periods of solid US credit, including low net charge offs at US Banks.

We do not expect a major consolidation wave to occur until the credit environment, balance sheets, and business models have stabilized. That said, there will clearly be M&A opportunities as some companies rationalize their business while others look to make selective acquisitions of attractively valued companies.

**Exhibit 66: Commercial and Savings Banks have had the biggest impact on Financial Services M&A over the past decade, though we think Specialty and Mortgage finance will lead the next wave in late 2008 and 2009**



Source: Dealogic.

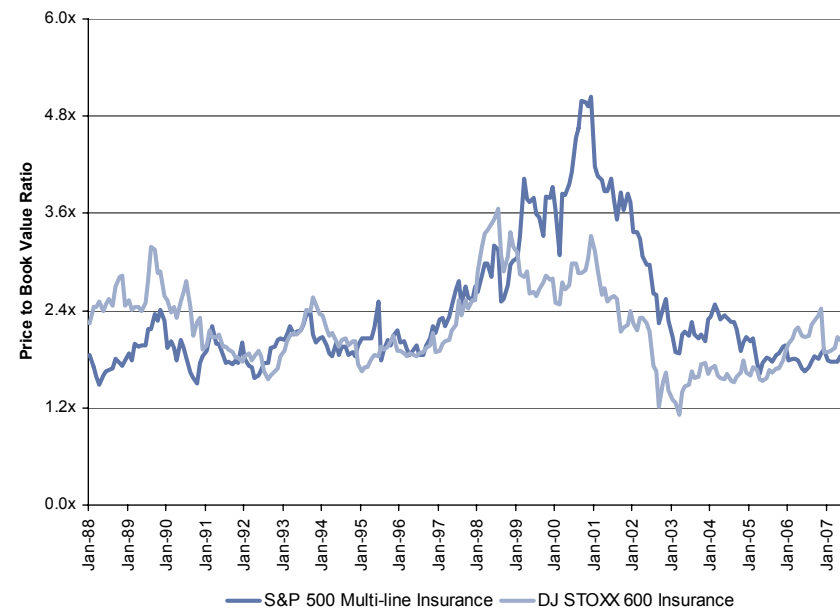
Commercial and Savings banks have accounted for 35% of US financial services M&A since 1995, but Specialty (13% CAGR in deals) and Asset Management firms (9% CAGR in deals) have experienced faster growth rates.

**Exhibit 67: European Bank P/BV valuations have just moved higher than US counterparts...**



Source: FactSet, Goldman Sachs Research.

**Exhibit 68: ...while European Insurance companies have been higher than US peers for over a year**



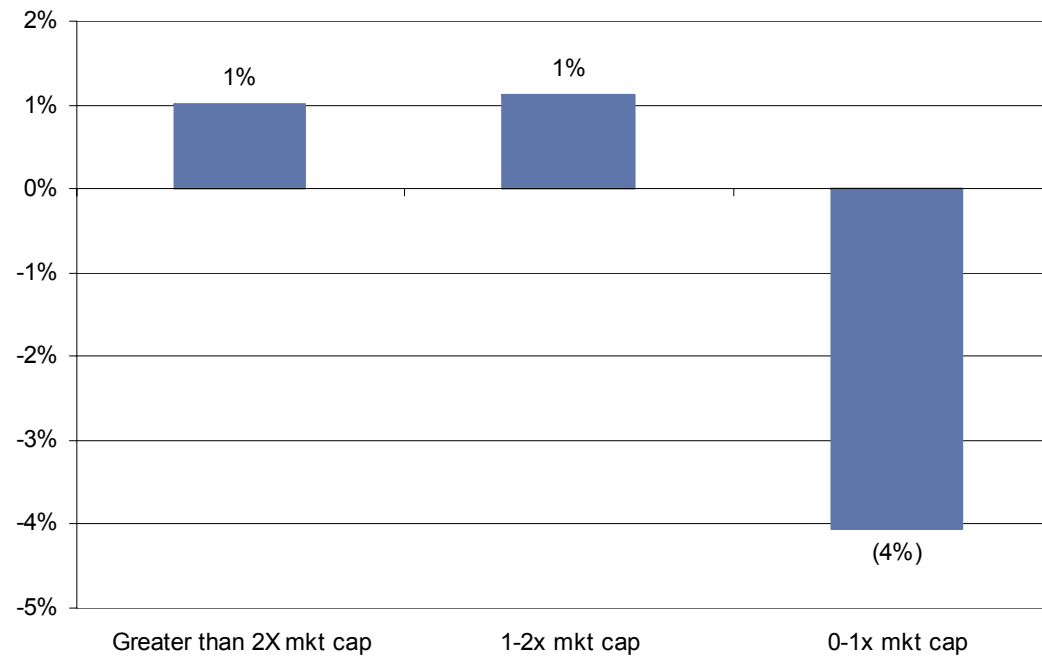
Source: FactSet, Goldman Sachs Research.

Two primary drivers will push consolidation forward in US financial services:

- Deposit funded institutions will look to pick up cheap lending capacity once the dust settles:** Different funding strategies exist across different models, but access to capital is at the core of a firm's ability to compete. Inability to access cheap capital for the mortgage insurers, guarantors, and originators will put them at a competitive disadvantage to peers and at risk of losing core business. Better capitalized peers that have access to cheaper funding via deposits (banks) or a lower borrow rate (insurance firms, brokers), will be the primary consolidators.
- Foreign buyers will be enticed to act given stronger currency:** The US dollar and valuation premium has deteriorated steadily. International firms are increasingly eyeing US targets given an inherent discount to previous valuations. In some cases, the US dollar has lost up to 15% in relative value over the past half year. In addition to the currency shift, European financial valuations have moved higher than their U.S counterparts (shown above).

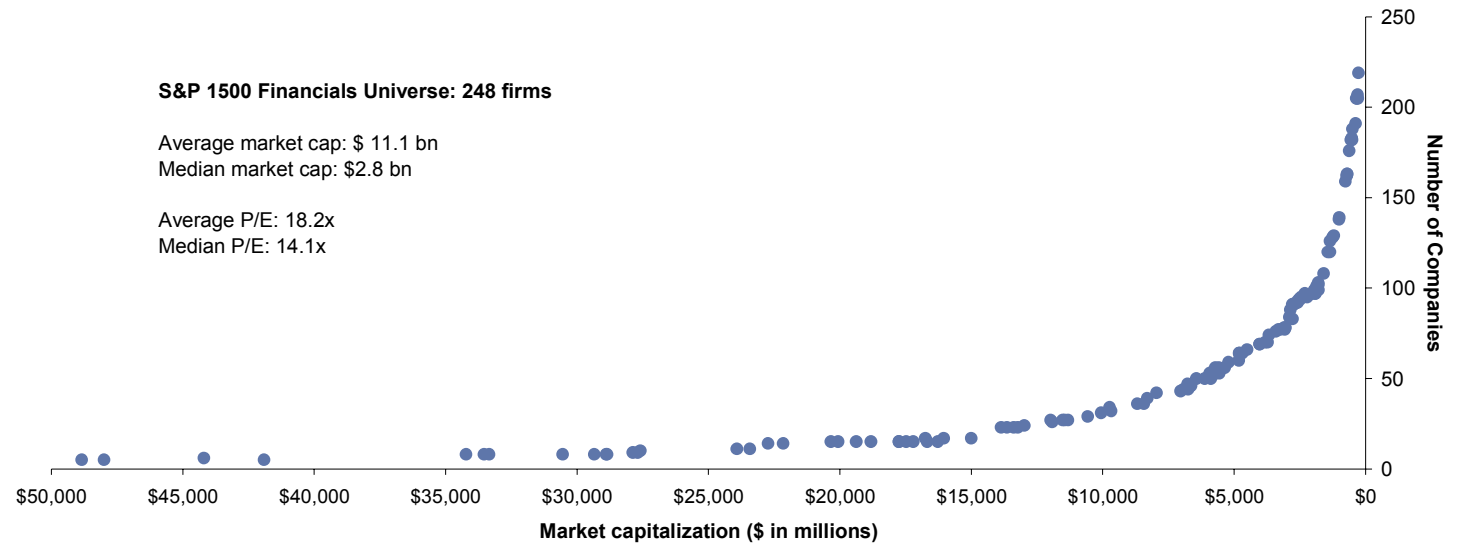
**Exhibit 69: The market has generally reacted favorably to financial transactions where the acquirer was much larger than the target and negatively when the target was a similar size to the acquirer**

1-day stock price reaction; market cap ratio based on acquirer to target market cap; 1995-2007YTD deals

*Source: Dealogic.*

While we think owning the right targets or acquirers will likely be beneficial on both sides, owning the acquirers is likely a safer strategy given the volatility in the targets. Further, the market tends to reward acquirers that make smaller acquisitions and punish those that make transformational (and thus larger) transactions. This reflects more limited risk to buyers when the targets are small.

**Exhibit 70: There are over 50 financial firms in the S&P 1500 that have the capacity to acquire firms in the Goldman Sachs Financials coverage universe that have at least a \$5 bn market cap**  
 capacity defined as having at least twice the market capitalization as the target



Source: Factset, Goldman Sachs Research.

As illustrated on the prior page, the market rewards acquirers who make acquisitions smaller than their market capitalization. Based on that fact, we have identified the number of US financial participants that are large enough to acquire other financial players. The results suggest there are significant potential buyers once the market has neared its trough.

**Exhibit 71: US Cross-Border deals still outnumber foreign acquisitions of US firms by more than two to one, but we anticipate a near to mid term reversal of that proportion in financial services**

\$ in millions

U.S. cross-border deals for international targets								
Year	Americas		Asia Pacific		EMEA		Total	
	Deal Value (\$m)	No.	Deal Value (\$m)	No.	Deal Value (\$m)	No.	Deal Value (\$m)	No.
1995	\$0	1	\$310	8	\$3,712	16	\$4,022	25
1996	--	--	\$0	2	\$159	15	\$159	17
1997	\$863	16	\$213	8	\$6,773	25	\$7,850	49
1998	\$874	25	\$1,662	22	\$1,769	48	\$4,305	95
1999	\$2,740	16	\$3,673	34	\$2,549	40	\$8,963	90
2000	\$784	20	\$3,515	49	\$12,930	46	\$17,229	115
2001	\$13,114	12	\$1,222	32	\$3,954	50	\$18,290	94
2002	\$342	12	\$2,933	38	\$3,206	31	\$6,482	81
2003	\$1,619	9	\$7,911	41	\$8,137	52	\$17,667	102
2004	\$134	5	\$10,343	38	\$4,889	43	\$15,366	86
2005	\$2,768	7	\$4,669	34	\$8,246	63	\$15,682	104
2006	\$2,248	14	\$6,057	50	\$7,057	61	\$15,362	125
2007YTD	\$3,548	27	\$17,151	66	\$19,998	46	\$40,696	139
<b>Total</b>	<b>\$29,036</b>	<b>164</b>	<b>\$59,659</b>	<b>422</b>	<b>\$83,378</b>	<b>536</b>	<b>\$172,072</b>	<b>1,122</b>
5 Yr CAGR	60%	18%	42%	12%	44%	8%	44%	11%

International cross-border deals for U.S. Targets								
Year	Americas		Asia Pacific		EMEA		Total	
	Deal Value (\$m)	No.	Deal Value (\$m)	No.	Deal Value (\$m)	No.	Deal Value (\$m)	No.
1995	\$0	1	\$1,560	2	\$581	4	\$2,141	7
1996	\$1,017	4	\$198	3	\$2,272	9	\$3,487	16
1997	\$741	9	\$120	5	\$8,317	15	\$9,178	29
1998	\$1,889	15	\$3,563	3	\$2,626	17	\$8,077	35
1999	\$98	8	\$0	3	\$19,434	24	\$19,532	35
2000	\$266	18	\$381	9	\$43,347	36	\$43,995	63
2001	\$5,148	11	\$341	4	\$14,609	38	\$20,098	53
2002	\$1,438	18	\$0	4	\$6,879	30	\$8,317	52
2003	\$628	9	\$208	3	\$16,702	26	\$17,538	38
2004	\$1,341	16	\$385	7	\$13,354	24	\$15,080	47
2005	\$4,344	13	\$508	4	\$4,964	27	\$9,817	44
2006	\$2,351	12	\$607	11	\$9,305	22	\$12,263	45
2007YTD	\$9,416	17	\$5,376	16	\$12,214	25	\$27,007	58
<b>Total</b>	<b>\$28,677</b>	<b>151</b>	<b>\$13,248</b>	<b>74</b>	<b>\$154,604</b>	<b>297</b>	<b>\$196,529</b>	<b>522</b>
5 Yr CAGR	46%	-1%	92%	32%	12%	-4%	27%	2%

Source: Dealogic, Goldman Sachs Research. Notes: Only includes financial services M&A. Based on completed transactions.

## Credit Research Views – Banks, Brokers and Specialty Finance

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The following text (pages 65 to 68) was authored by Charles Himmelberg and Louise Pitt of Credit Research.

### **The primary macro driver of credit markets over the past few months is the sharp deterioration of the US housing market**

CDS spreads have widened dramatically for companies with mortgage exposure. Over the past month, for example, 17 out of the 125 constituents of the CDX investment grade index have seen their CDS spreads widen by more than 100%. The biggest percentage jumps in CDS spreads have hit Washington Mutual (345%), Capital One (263%), MBIA (247%), and Citigroup (226%). These names are all in the spotlight for their mortgage exposures.

Most of the remaining 13 names also reflect mortgage fears of one sort or another, including exposure to mortgage origination (e.g., Countrywide), mortgage insurance (e.g., Radian), and insurance exposure to super-senior CDOs with mortgage exposure (e.g., Ambac). The CDX IG index does not include banks and brokers, but here, too, CDS have widened sharply on fears of mortgage exposures (e.g., Merrill Lynch).

The suddenness of the attention being paid to mortgage exposures reflects the fear that supply and demand conditions in the US housing market are deteriorating faster than anticipated. This is forcing the rating agencies to accelerate the downgrade of mortgage-exposed CDOs, and this in turn is forcing investors to recognize losses on their portfolio holdings of these instruments.

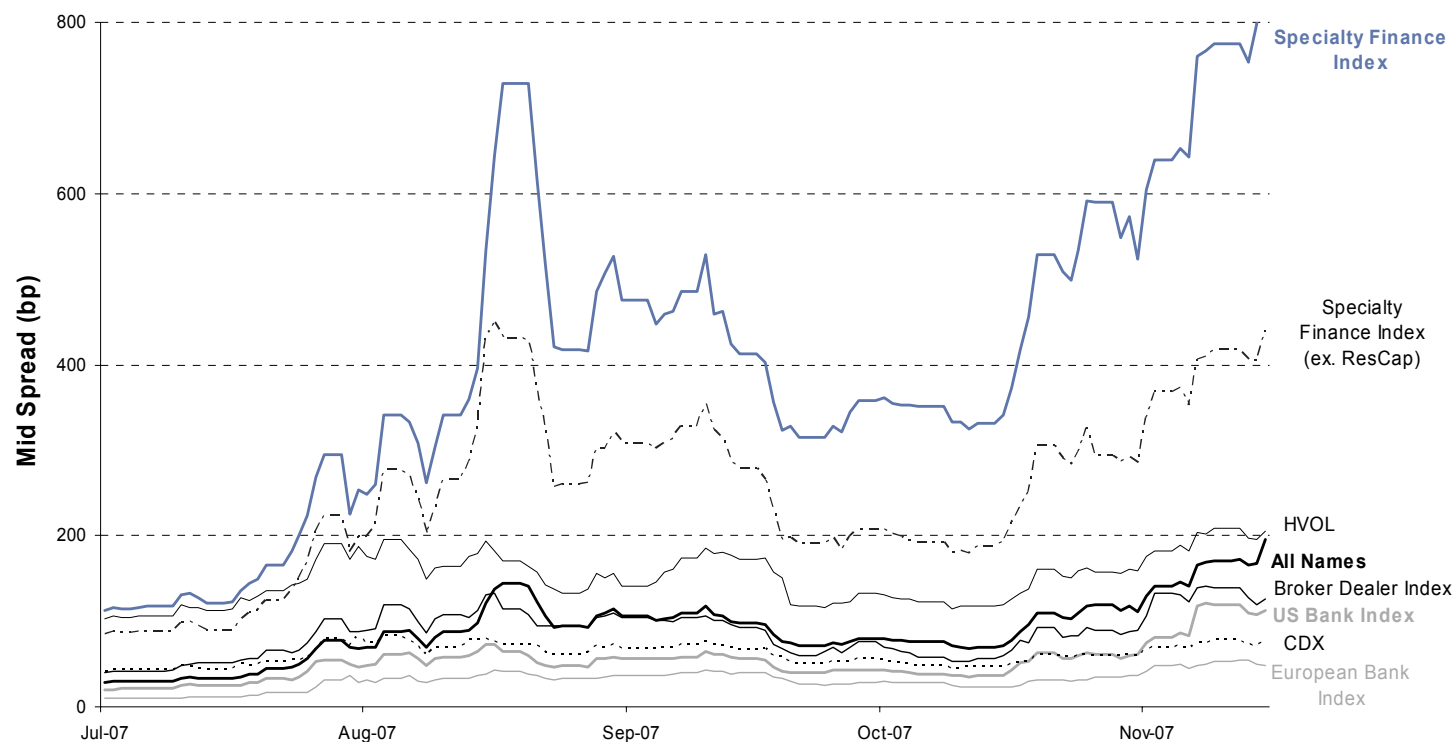
The level of spreads at which many banks and insurance companies now trade has created some surprising inversions. For example, Washington Mutual's senior unsecured debt is rated A3 by Moody's and its 5-year CDS trades at 370 bps, whereas Centex is rated Ba1; its CDS, too, trades at 385. Has the default risk of an investment-grade financial company like WM really dropped to the level of high-yield homebuilders? Probably not. WM could trade at a similar spread despite what is probably a lower default probability because financial services companies (like WM) are probably exposed to systemic risk in a way that homebuilders are not. In particular, the CDS spread on WM compensates for the risk that short-term funding conditions could suddenly freeze up (as they threatened to do in August). Such a collapse in funding would have a much more dramatic affect on the viability of WM than that of CTX.

### **Spreads for specialty finance names have been significantly more volatile than for banks and brokers, but today's concerns are different to those in August**

Relative to the sell off in August, CDS spreads have widened disproportionately in the finance company sector relative to the banks or broker dealers. However, the overall specialty finance index has been heavily influenced by Residential Capital (RESCAP), which is currently trading at a mid spread of around 4,000 bp. If we exclude this name, the trend remains the same, but clearly the absolute spread differences between the indexes are much lower. The significant decoupling of spreads initially started in August, when some of the more monoline players such as Countrywide (CFC) and RESCAP were facing significant funding pressure as ABCP and securitization markets were freezing up. This was especially pronounced for institutions with limited access to retail deposits.

The Fed rate cut in September helped ease short term funding pressures, but CDS levels have since retraced to wide levels. Among the factors that probably played into this: a) 3Q losses have been quantified and updates for 4Q to date have been released; b) risk appetite has fallen again as the Fed subsequently appeared to shift its attention from the financial markets back to inflation concerns; c) sizable losses at RESCAP and GMAC; and d) headlines on potential litigation issues for Washington Mutual (WM).

#### Exhibit 72: Specialty finance underperforms banks



European Banks includes: AAB, AIB, BBVASM, BNP, BACR, HVB, ACAFP, CS, DB, HBOS, INTNED, ISPIM, LLOYDS, RBS, SOCGEN, CRDIT, SEB, SVSKHB. US Banks includes: BAC, C, JPM, STI, WB, WM, WFC, COF. Specialty Finance includes: CFC, HSBC Finance, CIT, GMAC, RESCAP. Brokers includes: BSC, LEH, MER, MS.  
Source: Goldman Sachs Credit Research.

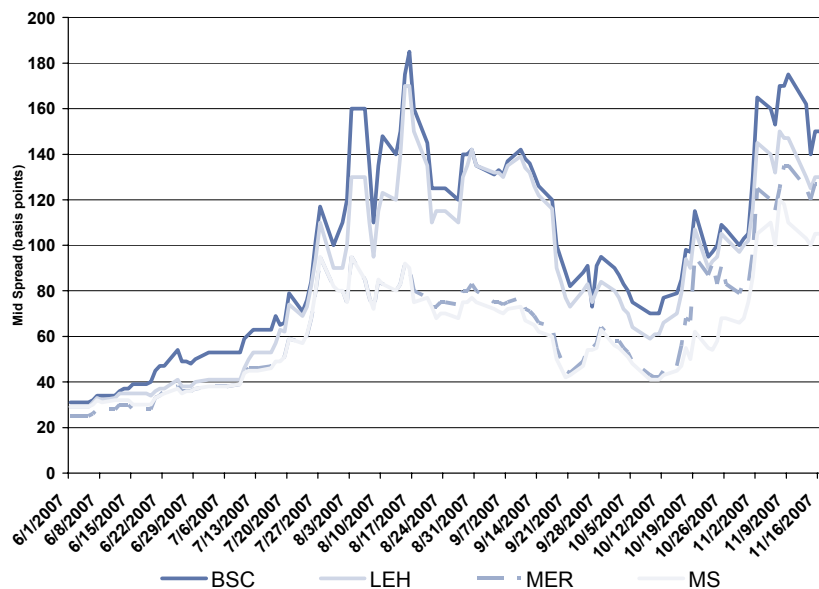
There is a lot of investor fear priced in to many names at the moment – fear of further write downs and losses, real damage to reputation causing business models to be put in jeopardy, liquidity drying up once again, book value losses causing dividends to be cut or suspended (which could ultimately cause concern to holders of hybrid or preferred securities as a result of some of these securities having covenants related to common dividends included), credit rating downgrades and the possibility of capital issuance to shore up capital ratios. The latter is particularly relevant for bondholders as management’s ability to issue hybrid capital and/or preferred stock instead of carrying out a right’s issue or sale of a stake to a third party is very important. We believe

that capital ratios will come under pressure in the coming quarters and think that many US banks and finance companies will need to raise core equity via dividend cuts, suspension of share buybacks, issuance of preferred stock, sales of non-core assets, and potentially common stock issuance (either to one buyer or through a right's issue).

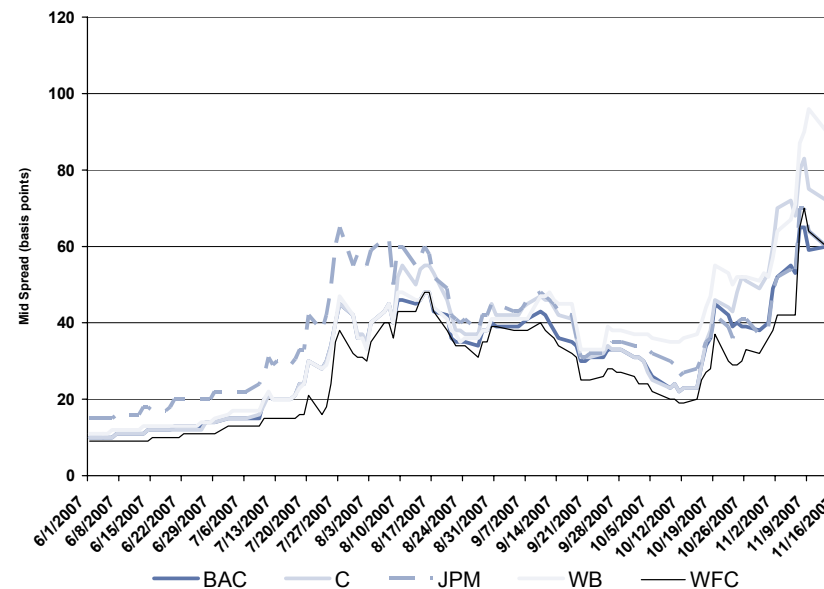
### **Do bank and specialty finance spreads already reflect the risk of further provisions and write downs?**

Yes, but not fully. Essentially, we do not think that cash and CDS levels fully compensate for the downside risk of a recession scenario in which mortgage losses would obviously increase, thus realizing some of the worst-case fears of losses from CDO and SIV exposures. This scenario would probably cause rating downgrades in the municipal bond markets, too, causing further losses. That said, CDS spreads do reflect a sizable amount of risk given our view that defaults and bankruptcies are highly unlikely in these sectors.

Spread widening in the last few weeks has been concentrated in the banks and brokers rather than the specialty finance names as the focus has shifted from short-term funding concerns to actual losses and potential for future profitability at many of these groups. In addition, the lack of liquidity in August drove spreads on Lehman (LEH) and Bear Stearns (BSC) to decouple from their larger peers, Morgan Stanley (MS) and Merrill Lynch (MER). However, the latest round of widening has been concentrated in MS and MER as they have announced large trading and CDO losses.

**Exhibit 73: Broker dealer spread differentials narrow once again**

Source: Goldman Sachs Credit Research.

**Exhibit 74: Banks have exceeded August's wide spreads as focus moves to capital from liquidity**

Source: Goldman Sachs Credit Research.

Concerns about risk management and lower capital levels at some of the largest banking groups has driven a renewed bout of investor purchases of CDS protection, but not necessarily from traditional credit investors (see Exhibit 3). Many investors from the mortgage and equity worlds have been using the CDS market to express short positions that are more difficult to implement in their own products. This has caused the widening to be more severe than it otherwise would have been in our view and has helped financials to underperform the CDX index. If spreads stay wide for the foreseeable future, and secured funding markets remain challenging for financials, many of these companies will face the prospect of issuing unsecured debt at much wider levels than in the past.

For example, the funding opportunities for banks and finance companies have diminished over the last few months, with foreign capital markets less willing to absorb issuance. We estimate that non-dollar issuance used to be roughly 50% of issuance, but this has fallen to around 20% or less in the last few months. In addition, there has been a forced move to longer-duration issuance, with financial companies issuing much more fixed-rate 10 and 30-year product than has been the case historically, when short term (18 month to three year maturity) floating-rate issuance could comprise almost 50% of a company's funding profile. We expect this situation to continue for the next few quarters at least as the investor base for short term paper (SIVs and conduits) are effectively not in the market for assets. In fact, we may see net sellers of assets from that community in the coming months, which could incrementally increase the pressure on secondary spreads. Furthermore, neither the securitization markets nor whole loan sales are operating effectively from a cost perspective for many players; premia for carrying out these transactions sometimes higher than is economically viable for the institution in question. Therefore, we believe that unsecured fixed rate bond issuance in dollars is likely

to increase meaningfully in the next six months, which will maintain the pressure on secondary cash spreads but could also present some opportunities to get back into some of the names in this sector.

In sum, we think both cash and CDS spreads will likely hit new wides before we hit the bottom. Having said that, we do not expect the situation to deteriorate to such an extent that any banks or finance companies actually default – there will be a time to buy risk in these names, but not yet. We currently prefer defensive players with large capital bases and a strong flow of international earnings. Our favored names within the US bank and finance sectors remain Bank of America (BAC), JP Morgan Chase (JPM), and Washington Mutual (WM). BAC and JPM have outperformed their large banking peers and we believe they will continue to do so. WM has underperformed the bank group but outperformed the mortgage finance sector and we believe spreads are extremely wide now given the ultimate risk of default or credit downgrades. On the sell side, we think Capital One (COF), GMAC and Wachovia (WB) will continue to underperform their peer groups given the outlook for the continued deterioration in mortgage and other consumer lending segments.

## Credit Research Views – Insurance

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The following text (pages 69 to 73) was authored by Donna Halverstadt of Credit Research. The views expressed were authored on November 12<sup>th</sup>, 2007.

### Moves in insurance CDS – A Tale of Two Cities

Within the credit markets, the insurance space has been a tale of two cities, with the specialty insurers exhibiting extreme weakness and volatility, and most of the rest of the universe exhibiting relatively stable spreads (with a few key exceptions). When we speak of the specialty insurers, we are referring to the mortgage insurers and the bond insurers (financial guaranty). For those who do not traffic in the credit markets, it may be illustrative to put some context around the magnitude of the moves we've seen. In the beginning of the year, in 5-year CDS some of the household names in both life and property/casualty were quoted at high single-digit/low double-digit levels, while some of the Bermuda names were in the range of 20 to 30 bps. At the same time, mortgage insurers were hovering around either side of 30 bp, and the bond insurers ranged from high single digits into the 20s (bear in mind, some the financial guarantors trade at both the AAA (operating company) and AA (holding company) level. By mid-summer, levels had weakened across all of these sub-sectors, but not significantly. There were significant moves in credit levels during August. By the end of October, there was additional (slight, on a relative basis) weakening in non-specialty insurance, but massive weakening in specialty insurance. By the end of October, the mortgage insurers were quoted roughly 15-25x wider than they had been quoted in February, and the more active names in bond insurance were anywhere from 20-80x wider than they had been in February. The exhibit below provides some details on these moves in credit spreads. Not only have levels widened dramatically, so has the bid-ask spread.

**Exhibit 75: Historical 5-year CDS levels for certain insurers and specialty insurers**

	Feb 22	Jun 12	Oct 18	Oct 31	Nov 9
<b>Household names in the life, P&amp;C and Bermuda space</b>					
AllState	8/11	12/14	23	21/26	35
Chubb	8/11	12/14	24	22/27	35
Hartford	9/11	12/14	29	30/35	45
MetLife	10/12	12/14	30	32/39	45
Prudential	9/11	12/14	37	36/43	57
Ace	17/20	24/27	27	25/30	38
<b>Mortgage insurers</b>					
PMI	29/32	31/35	180/205	300/330	500
MGIC	31/34	48/53	230/255	350/380	500
Radian	32/35	52/57	495/535	700/750	900
<b>Bond insurers</b>					
Ambac (AAA)	9/11	15/18	180/195	260/285	390
MBIA (AAA)	14/17	23/26	120/135	210/230	305
FGIC	9/11	13/15	240/265	390/420	800
Ambac (AA)	10/12	26/30	290/315	475/505	680
MBIA (AA)	20/23	46/50	175/195	295/320	460

Source: Goldman Sachs Research. Where bid/ask not shown it was not available.

**Why the dichotomy? Relative exposure to triple-M (the mortgage meltdown mess)**

Clearly, there has been a divergence in insurance credit spreads between the regular insurers and the specialty insurers. Why is that? In short, subprime. While the regular insurers may have some amount of exposure to the 'mortgage meltdown mess' through their investment portfolios and, potentially in certain cases, through liability policies written to those involved in the mortgage food chain, those exposures are generally viewed as significantly less than the mortgage-related risk borne by the mortgage insurers and the bond insurers. Not to mention the fact that certain of our names (PMI and Radian) have the double whammy of not just mortgage insurance risk, but also financial guaranty risk.

**Why the severe moves in specialty insurance? Difficulty in sizing the pig**

The mortgage insurers are in the business of insuring high LTV residential mortgage credit risk, which in today's environment makes for extreme challenges. As we wrote on October 19, the pig will pass through the python, but the journey will be difficult. The addendum to that thought is that over the last several weeks, the market has increasingly focused on trying to assess how large that pig is. We believe that one of the reasons that spreads have been so weak and so volatile is the difficulty that exists in trying to draw a box around the size of the problem. At a base level, given that – as just one example – reset volumes for subprime ARMs do not peak until March 2008 and recast volumes for pay-option ARMs do not peak until June 2010 – there is still much to

play out in the underlying mortgage markets. Other key variables include the facts that we are still in the beginning stages of home price declines and unemployment may be poised to rise. Within the mortgage insurance space, additional reasons that make sizing the pig difficult include the facts that the 2005-2007 books are still seasoning, loss guidance is either escalating or being withdrawn, and the detail on captive arrangements (and related benefits) is not detailed clearly.

Moving on to sizing the pig on the financial guaranty side of the business, we find it even more difficult to confidently assess not just real potential losses, but increased capital requirements that precede actual losses. While the larger percentage of net par outstandings for the bond insurers is US public finance obligations (roughly 50-70% for ABK, MBI and FGIC), they also wrap, or guaranty, structured finance and international obligations. Within the structured finance business, the assets underlying the bonds are from a variety of asset classes, including residential mortgages. Given today's stresses in the mortgage markets, a great deal of focus is being paid to the RMBS and the CDOs (including CDO squared) wrapped by the guarantors. On structured finance transactions, the guarantors often-times provide the credit enhancement through a highly-tailored CDS contract (as opposed to through its traditional insurance policy). The CDS is marked-to-market (the insurance policies are not). In essence, this substitutes the market's judgment (the CDS mark) for management's judgment (in setting reserves). While these marks impact the GAAP balance sheet, they do not impact the statutory financial statements (which are key to assessing claims paying resources and supporting credit ratings). Having said that, the marks and resultant impacts on both the GAAP income statement and balance sheet could impact perceptions, which in turn could have a negative impact on new business flows. There is also the question of potentially impacting a company's ability to access credit lines. S&P has suggested that none of the triple-A guarantors have minimum net worth covenants in their bank lines. PMI (who owns 42% of FGIC) does have such a covenant, which requires that PMI's adjusted consolidated net worth be at least about \$2.18 billion.

The management teams of the larger bond insurers continue to state that these marks are not indicative of future credit losses, and that they expect little, if any, in the way of actual credit losses. Whether one buys into that view or not, and even before any credit losses may be realized, the bond insurers do face increased rating agency capital requirements as RMBS and CDOs that they have wrapped are downgraded. Even triple-A tranches are being downgraded, and oftentimes to below investment grade status. Ambac and MBIA each stated that if its subprime RMBS and multi-sector CDOs with subprime exposure were downgraded by 1-notch, the incremental rating agency capital requirement would be \$219 million and \$25-50 million, respectively, and that a 3-notch downgrade of all such securities would lead to increased capital requirements of \$630 million and \$100-150 million, respectively. MBIA further disclosed that if 10% of such securities were downgraded to below investment grade (BIG) and the rest had a one-notch downgrade, the incremental rating agency capital requirement would be \$150-425 million. What if 25% of the securities go BIG and the rest are subject to a 2-notch downgrade? What if 50% go BIG and the rest are subject to a 3-notch downgrades? What if 80% go BIG? It is fair to say the change in the incremental capital requirement would be exponential not linear, but short of having the disclosure, tools or details to confidently assess such, it is easy to see how the imagination can run wild. In addition to the inability to confidently assess changing capital requirements, disclosure on how fast and in what increments the most capital-intensive business runs off (in turn freeing up capital) is extremely limited.

### **No visibility on the bottom + rating agency D-Days = no optimism on spreads (yet)**

On MGIC's third quarter earnings call, it was clear that there is – as of yet – no clarity as to when or how large the bottom might be. The fact that on October 18, when PMI pre-announced 3Q2007 incurred losses of \$350 million for its US MI operations, it also withdrew guidance for the full year, underscores the lack of visibility on “when” and “how deep” the bottom will be. Mortgage resets have not peaked and books of business are still seasoning. We believe that that there will be a great deal of uncertainty and

skepticism until industry participants see things play out over time. We think that the next 4-5 months will be key for information flow related to the underlying mortgages.

On top of that, two of the three rating agencies have drawn 'lines in the sand' with respect to the time-frame over which they are re-assessing the bond insurers' capital. Upcoming rating agency D-Days are the 'end of the month' for Moody's and December 3rd-17th for Fitch (but Fitch will grant a one-month stay of execution for any guarantor that ends up on negative watch). More specifically, on November 5th, Fitch disclosed that it is rerunning its financial guarantor capital adequacy models, that such exercise will be completed over the next 4-6 weeks, at which point the insurers will be affirmed or put on negative watch. If one lands on negative watch, it would have about one month to fix the problem. Moody's on November 9th said that it was rerunning its capital models, that such exercise would be completed by the end of the month, at which point the insurers would be affirmed, be subject to an outlook change, be put on negative watch, or actually be downgraded. The two rating agencies bucketed the insurers by their likelihood of capital pressure and potentially failing AAA capital models. They each view FSA and Assured Guaranty as having minimal probability of undue pressure on the capital cushion; MBIA as having low probability; and Ambac and Security Capital as having moderate probability. Moody's also views FGIC as being in the moderate probability category, while Fitch views FGIC as being in the high probability of pressure category.

In the near term (the next several weeks), we think that the markets for both the bond insurers and the mortgage insurers (two of three that we follow have exposure to the financial guaranty business) will likely remain weak and will be quite volatile over the next several weeks as we approach the Rating Agency D-Days discussed above. In the medium-term (the next 4-5 months), we believe that the passage of time will be key for information flow related to the depth and breadth of deterioration in the underlying mortgage market. It is hard for us to imagine spreads tightening significantly and stabilizing at some new, tighter level before events of the next several weeks and months play out. As such, we maintain our Cautious view on the Mortgage Insurance sector, as well as our Underperform ratings on PMI and Radian. While significant widening had also been expected on MGIC, we expected that it would perform relatively better than PMI or RDN, and, thus, of the three names in our Mortgage Insurance sector, picked it as our In-Line. Clearly, relative to the broader insurance universe, it is an underperformer. The risk to our conclusions on the Mortgage Insurance sector is that sentiment turns on a dime prior to developing a sense of "when" and "how deep" the bottom will be.

On October 19 we put on a PMI/MTG pair trade, expecting PMI's spreads to widen relative to MGIC's. In particular, we recommended buying protection in 5-year CDS on PMI (getting short the credit) and selling protection on MGIC (getting long the credit). In particular, we believed that the market had not sufficiently embedded (in PMI's spreads relative to MGIC's) either (a) potentially larger jumps in PMI's loss and reserve trends relative to peers or (b) the potential for distraction provided by FGIC. In mid-October PMI and MTG were roughly 50 bp apart; by late last week they were flat. Given that FGIC is relatively more exposed to some of the more capital-intensive mortgage-related product, we believe that the trade will continue to work and we maintain the trade in the run-up to the Rating Agency D-Days. Furthermore, whereas earlier in October we viewed FGIC as a potential distraction for PMI, now we are quite concerned about the outcomes of pending rating agency reviews and related implications for capital adequacy at the guarantors. While the guarantors can engage in a variety of initiatives to preserve capital (slow growth in the business, buy reinsurance, raise capital – we believe private investors are more likely than public ones at this point, and pursue more creative approaches to reducing risk and/or raising capital), we believe that doing so over the next 3 weeks (Moody's time frame) poses an incredible hurdle for any who fall below triple-A capital requirements.

Underlying positives for fundamentals are already evidencing themselves in both the mortgage insurance and bond insurance spaces. In the mortgage insurance space, increasing persistency and penetration are important positives. Trends that should continue to benefit the mortgage insurers include improving underwriting standards (from a securitization mindset back to a portfolio lending mindset), a decrease in competition (from products such as piggy-back loans), and an increasing portion of GSE

business in the mortgage market (which could get a further boost if legislation extends the reach of the GSEs). Likewise, the bond insurers describe a renewed interest in their product as appreciation for credit risk has re-awakened, along with the fundamental that both pricing and demand improves as credit spreads widen. While these types of trends are positives longer-term, in the near-term these positives are significantly more than overshadowed by a variety of factors, including the actual mortgage losses being born by the mortgage insurers, by the mark-to-markets on CDS being taken by the financial guarantors, and by the incremental capital requirements the financial guarantors must meet as the underlying bonds are downgraded (D-Day looms). In turn, this all boils down to the fact that both the mortgage insurers (a double-A financial strength rating business model) and the bond insurers (a triple-A financial strength rating business model) must maintain financial strength ratings in the necessary rating category in order to preserve the value of their respective franchises. And while the market may get bulled-up one day on positive news flow, it is hard to see it staying bulled-up in the face of extreme asymmetrical risk in the short-term – especially in the face of the very near-term rating agency D-Days and the specter of pressure on those critical-for-the-business financial strength ratings.

**Exhibit 76: Financials comp table - BANKS**  
 as of November 16, 2007

BANKS		Price Pfmnce										GS EPS Estimate			Valuation			
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06 P/E	07 P/E	08 P/E	07E P/B	Div Yield (%)
BB&T Corp.	BBT	33.71	19	N	43	12 months	28%	-1.4%	-12.8%	-23%	3.02	3.26	3.45	11.2x	10.3x	9.8x	1.5x	5.5%
Bank of America Corporation	BAC	44.37	197	B	57	12 months	28%	0.9%	-11.6%	-17%	4.71	4.16	4.70	9.4x	10.7x	9.4x	1.4x	5.8%
Fifth Third Bancorp	FITB	27.81	15	NR	--	--	--	-3.5%	-10.7%	-32.05%	2.13	2.59	2.85	13.1x	10.7x	9.8x	1.6x	6.0%
KeyCorp	KEY	25.5	10	N	36	12 months	41%	-3.8%	-16.2%	-33%	2.97	2.79	2.95	8.6x	9.1x	8.6x	1.3x	5.7%
National City Corp.	NCC	20.62	13	N	26	12 months	26%	-1.2%	-14.6%	-44%	3.72	1.75	2.15	5.5x	11.8x	9.6x	1.0x	8.0%
PNC Financial Services	PNC	69.67	24	N	76	12 months	9%	1.3%	5.2%	-6%	5.06	5.45	6.05	13.8x	12.8x	11.5x	1.6x	3.6%
Regions Financial Corp.	RF	24.32	17	N	35	12 months	44%	-2.8%	-14.8%	-35%	2.69	2.65	2.70	9.0x	9.2x	9.0x	0.8x	6.3%
SunTrust Banks, Inc.	STI	68.55	24	N	80	12 months	17%	1.6%	-4.7%	-19%	5.82	5.64	6.35	11.8x	12.1x	10.8x	1.4x	4.3%
U.S. Bancorp	USB	31.43	54	B	37	12 months	18%	1.6%	-2.8%	-13%	2.61	2.61	2.85	12.1x	12.0x	11.0x	2.7x	5.1%
Wachovia Corp.	WB	39.14	74	NR	--	--	--	-3.7%	-20.1%	-31%	4.71	3.87	4.50	8.3x	10.1x	8.7x	1.1x	6.5%
Wells Fargo & Company	WFC	31.14	104	B	38	12 months	22%	-1.6%	-9.9%	-12%	2.49	2.68	2.90	12.5x	11.6x	10.8x	2.1x	4.0%
<b>Large Cap Bank Avg</b>							<b>26%</b>	<b>-1.1%</b>	<b>-10.3%</b>	<b>-24.1%</b>				<b>10.5x</b>	<b>11.0x</b>	<b>9.9x</b>	<b>1.5x</b>	<b>5.5%</b>
Northern Trust Corp.	NTRS	76.32	17	N	69	12 months	-10%	0.3%	6.9%	26%	3.00	3.60	3.95	25.4x	21.2x	19.3x	3.8x	1.5%
State Street Corp.	STT	75.45	29	B	88	12 months	17%	1.8%	1.0%	12%	3.45	4.35	4.90	21.8x	17.3x	15.4x	2.3x	1.2%
<b>Processing &amp; Trust Bank Avg</b>							<b>4%</b>	<b>1.1%</b>	<b>4.0%</b>	<b>18.8%</b>				<b>23.6x</b>	<b>19.3x</b>	<b>17.3x</b>	<b>3.0x</b>	<b>1.3%</b>
City National Corp.	CYN	63.49	3	N	73	12 months	15%	-1.6%	-7.1%	-11%	4.66	4.82	5.25	13.6x	13.2x	12.1x	1.9x	2.9%
Comerica, Inc.	CMA	43.54	7	S	57	12 months	31%	-3.1%	-13.0%	-26%	5.50	4.74	4.70	7.9x	9.2x	9.3x	1.3x	5.9%
First Horizon National Corp.	FHN	21.09	3	S	23	12 months	9%	-7.3%	-14.0%	-50%	2.68	0.81	1.80	7.9x	26.0x	11.7x	1.1x	8.5%
Huntington Bancshares Inc.	HBAN	14.75	5	S	17	12 months	15%	-9.3%	-13.1%	-38%	1.92	1.51	1.70	7.7x	9.8x	8.7x	0.7x	7.2%
Marshall & Ilsley Corp.	MI	30.91	8	B	54	12 months	75%	2.4%	-26.9%	-36%	3.22	3.37	3.65	9.6x	9.2x	8.5x	1.1x	4.0%
Western Alliance Bancorp.	WAL	20.18	1	N	27	12 months	34%	0.4%	-8.7%	-42%	1.41	1.32	1.45	14.3x	15.3x	14.0x	1.4x	0.0%
Zions Bancorporation	ZION	51.95	6	B	82	12 months	58%	-2.8%	-19.8%	-37%	5.45	5.35	5.60	9.5x	9.7x	9.3x	1.2x	3.3%
<b>Mid-Cap Bank Avg</b>							<b>34%</b>	<b>-3.0%</b>	<b>-14.6%</b>	<b>-34.1%</b>				<b>10.1x</b>	<b>13.2x</b>	<b>10.5x</b>	<b>1.2x</b>	<b>4.5%</b>
Washington Mutual, Inc.	WM	19.94	17	N	18	12 months	-10%	-2.4%	-39.9%	-56%	3.20	2.26	2.00	6.2x	8.8x	10.0x	0.7x	11.2%
Capital One Financial Corp.	COF	53.05	20	B	81	12 months	53%	-2.2%	-20.8%	-31%	7.51	4.95	7.40	7.1x	10.7x	7.2x	0.8x	0.2%
<b>Bank - Specialty Finance and Mortgage Avg</b>							<b>21%</b>	<b>-2.3%</b>	<b>-30.4%</b>	<b>-43.6%</b>				<b>6.6x</b>	<b>9.8x</b>	<b>8.6x</b>	<b>0.8x</b>	<b>5.7%</b>

**Target Price Methodology and Risk:**
**Banks**

Price Target Methodology: All price targets are derived from discounted cash flow (DCF) models.

Risks: The key risks to our price targets for Large- and Mid-Cap Banks would be (1) deterioration in credit quality, (2) a yield curve that is significantly flatter / more inverted than what is implied by market forward curves, or (3) acquisitions made that are dilutive to EPS.

The key risk to our price targets for Processing & Trust Banks is lower fee revenue resulting from a significant downturn in US and/or global equity markets.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

**Exhibit 77: Financials comp table – SPECIALTY AND MORTGAGE**  
 as of November 16, 2007

SPECIALTY AND MORTGAGE FINANCE								Price Pfmnce			GS EPS Estimate			Valuation				
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06 P/E	07 P/E	08 P/E	07E P/B	Div Yield (%)
Countrywide Financial Corp.	CFC	12.07	7	S	14	12 months	16%	-1.1%	-33.3%	-72%	4.29	-0.35	2.15	2.8x	-34.3x	5.6x	0.5x	5.0%
Fannie Mae	FNM	40.69	40	N	60	12 months	47%	-5.5%	-36.2%	-31%	3.55	1.67	3.40	11.5x	24.3x	12.0x	1.3x	4.9%
Freddie Mac	FRE	40.72	27	N	73	12 months	79%	-2.7%	-29.3%	-40%	5.31	6.27	6.99	7.7x	6.5x	5.8x	0.7x	4.9%
<b>Mortgage Finance Avg</b>							<b>48%</b>	<b>-3.1%</b>	<b>-32.9%</b>	<b>-47.7%</b>				<b>7.3x</b>	<b>-1.2x</b>	<b>7.8x</b>	<b>0.8x</b>	<b>4.9%</b>
H&R Block, Inc.	HRB	19.50	6	NR	--	--	--	-1.7%	-10.6%	-15%	1.55	1.06	1.35	12.6x	18.4x	14.4x	4.5x	2.9%
Jackson Hewitt Tax Service Inc.	JTX	33.44	1	S	25	12 months	-25%	0.9%	6.8%	-2%	1.65	2.07	1.85	20.3x	16.2x	18.1x	3.3x	2.2%
<b>Tax Prep Avg</b>							<b>-25%</b>	<b>-0.4%</b>	<b>-1.9%</b>	<b>-8.5%</b>				<b>16.5x</b>	<b>17.3x</b>	<b>16.3x</b>	<b>3.9x</b>	<b>2.5%</b>
Advanta Corp.	ADVNB	13.43	1	N	15	12 months	12%	1.4%	-50.1%	-54%	1.91	2.05	2.15	7.0x	6.6x	6.2x	0.9x	6.3%
American Express Co.	AXP	58.67	69	B	77	12 months	31%	0.7%	-2.6%	-3%	3.01	3.50	3.85	19.5x	16.8x	15.2x	6.4x	1.0%
AmeriCredit Corp.	ACF	10.94	1	S	12	12 months	10%	-4.4%	-40.5%	-57%	2.05	2.71	2.15	5.3x	4.0x	5.1x	0.6x	0.0%
Discover Financial Services	DFS	17.76	8	S	16	12 months	-10%	0.5%	-15.1%	-38%	2.21	1.68	1.25	8.0x	10.6x	14.2x	1.5x	0.3%
<b>Consumer Finance Avg</b>							<b>11%</b>	<b>-0.5%</b>	<b>-27.1%</b>	<b>-38.0%</b>				<b>10.0x</b>	<b>9.5x</b>	<b>10.2x</b>	<b>2.4x</b>	<b>1.9%</b>
CIT Group Inc.	CIT	29.52	6	N	35	12 months	19%	-1.6%	-20.5%	-47%	4.80	5.21	5.50	6.2x	5.7x	5.4x	0.8x	3.4%
CapitalSource Inc.	CSE	15.55	3	N	18	12 months	16%	-0.3%	-15.5%	-43%	2.50	2.46	2.55	6.2x	6.3x	6.1x	1.2x	15.4%
iStar Financial Inc.	SFI	28.80	4	B	45	12 months	56%	-3.1%	-13.8%	-40%	3.61	4.10	4.20	8.0x	7.0x	6.9x	1.2x	11.5%
<b>Commercial Finance Avg</b>							<b>30%</b>	<b>-1.7%</b>	<b>-16.6%</b>	<b>-43.3%</b>				<b>6.8x</b>	<b>6.3x</b>	<b>6.1x</b>	<b>1.1x</b>	<b>10.1%</b>
First Marblehead Corp.	FMD	31.46	3	N	37	12 months	18%	1.1%	-21.4%	-42%	2.45	3.91	4.47	12.8x	8.0x	7.0x	3.5x	3.5%
Nelnet, Inc.	NNI	14.15	1	N	19	12 months	34%	-3.4%	-26.3%	-48%	1.95	0.91	1.90	7.2x	15.5x	7.5x	1.0x	2.0%
SLM Corp.	SLM	39.05	16	N	46	3 months	18%	-0.6%	-17.1%	-20%	2.83	2.28	3.05	13.8x	17.1x	12.8x	3.4x	0.0%
<b>Student Lending Avg</b>							<b>23%</b>	<b>-1.0%</b>	<b>-21.6%</b>	<b>-36.9%</b>				<b>11.3x</b>	<b>13.5x</b>	<b>9.1x</b>	<b>2.6x</b>	<b>1.8%</b>
Ambac Financial Group, Inc.	ABK	27.46	3	N	35	12 months	27%	-2.8%	-57.4%	-69%	7.70	7.82	8.53	3.6x	3.5x	3.2x	0.5x	3.1%
Assured Guaranty Ltd.	AGO	20.90	1	N	20	12 months	-4%	-1.5%	-25.2%	-21%	2.11	2.68	2.70	9.9x	7.8x	7.7x	0.9x	0.8%
MBIA Inc.	MBI	37.19	5	N	50	12 months	34%	-2.5%	-41.4%	-49%	5.81	6.17	6.85	6.4x	6.0x	5.4x	0.7x	3.7%
Security Capital Assurance Ltd.	SCA	5.95	0	N	12	3 months	102%	-0.2%	-71.5%	-79%	2.71	2.86	3.10	2.2x	2.1x	1.9x	0.2x	1.3%
<b>Financial Guaranty Avg</b>							<b>40%</b>	<b>-1.7%</b>	<b>-48.9%</b>	<b>-54.6%</b>				<b>5.5x</b>	<b>4.9x</b>	<b>4.6x</b>	<b>0.6x</b>	<b>2.2%</b>
AerCap Holdings N.V.	AER	22.33	2	N	30	12 months	34%	-2.7%	-17.4%	-4%	1.98	2.22	2.75	11.3x	10.1x	8.1x	2.0x	0.0%
Aircastle Ltd.	AYR	27.95	2	N	35	12 months	25%	-1.4%	-11.4%	-5%	1.05	1.75	2.35	26.5x	15.9x	11.9x	1.6x	8.5%
<b>Aircraft Lessor Avg</b>							<b>30%</b>	<b>-2.1%</b>	<b>-14.4%</b>	<b>-4.5%</b>				<b>18.9x</b>	<b>13.0x</b>	<b>10.0x</b>	<b>1.8x</b>	<b>4.3%</b>
<b>Total Specialty Finance Avg</b>							<b>25%</b>	<b>-1.3%</b>	<b>-25.6%</b>	<b>-35.2%</b>				<b>10.5x</b>	<b>9.8x</b>	<b>8.4x</b>	<b>1.9x</b>	<b>3.9%</b>

**Target Price Methodology and Risk:**
**SPECIALTY AND MORTGAGE FINANCE**

**Price Target Methodology:** Price targets are derived from discounted cash flow (DCF) models. Discover is a 12 month, sum of the parts based price target.

**Key Risks:**

FNM - Unable to restate before year end 2006, unforeseen credit issues.

FRE - Unable to return to regular reporting in 2007, unforeseen credit issues.

WM - Unforeseen credit issues, target speculation or acquisition at a premium.

CFC - Further generous buy-backs throughout 2007, target speculation or acquisition at a premium.

JTX - Regulation imposed by potential predatory lending bill, disappointing tax season.

AXP - Litigation risks, brand dilution from growth in the network business.

ACF - Worsening sub-prime credit trends, regulation imposed by potential predatory lending bill.

ADVNB - Ongoing target speculation or acquisition at a premium.

CIT - Cost growth in excess of expectation, unforeseen credit issues.

DFS - Credit deterioration.

SFI - Unforeseen credit issues.

CSE - Unforeseen credit issues.

SLM - Draconian legislation, unforeseen credit issues from private loans.

FMD - Reversal of pricing momentum, competition from Wall Street firms.

NNI - Quick success of diversification strategy, decision reversal on 9.5% loans.

ABK - Unforeseen credit issues, corporate credit spreads remain tight.

AGO - Moody's upgrade to triple-A ruled out, unforeseen credit issues.

MBI - Unforeseen credit issues, further delays in settling litigation.

SCA - Unforeseen credit issues, corporate credit spreads remain tight.

AER - Fuel prices, terrorism, geopolitical conditions.

AYR - Fuel prices, terrorism, geopolitical conditions.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

**Exhibit 78: Financials comp table – BROKERS**  
 as of November 16, 2007

BROKERS								Price Pfmnce			GS EPS Estimate			Valuation				
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06 P/E	07 P/E	08 P/E	07E P/B	Div Yield
Citigroup Inc.	C	34.00	168	S	33	12 months	-3%	2.7%	-24.1%	-39%	4.23	2.20	3.80	8.0x	15.5x	8.9x	1.4x	6.4%
J.P. Morgan Chase & Co.	JPM	43.09	147	N	46	12 months	7%	1.8%	-4.5%	-11%	4.04	4.56	4.55	10.7x	9.4x	9.5x	1.2x	3.5%
Lehman Brothers Holdings Inc.	LEH	62.38	36	N	70	12 months	12%	7.4%	2.8%	-20%	6.81	7.56	7.20	9.2x	8.3x	8.7x	1.6x	1.0%
Merrill Lynch & Co., Inc.	MER	56.11	52	N	59	12 months	5%	5.3%	-21.8%	-40%	7.60	0.73	5.50	7.4x	76.9x	10.2x	1.4x	2.5%
Morgan Stanley & Co.	MS	52.9	56	B	61	12 months	15%	-2.4%	-19.0%	-35%	7.07	4.70	4.52	7.5x	11.3x	11.7x	1.6x	2.0%
The Bear Stearns Co., Inc.	BSC	99.07	14	N	106	12 months	7%	2.2%	-19.5%	-39%	14.27	6.00	9.00	6.9x	16.5x	11.0x	1.0x	1.3%
<b>Universal and Inv Bank Avg</b>							<b>7%</b>	<b>2.9%</b>	<b>-14.3%</b>	<b>-30.6%</b>				<b>8.3x</b>	<b>23.0x</b>	<b>10.0x</b>	<b>1.4x</b>	<b>2.8%</b>
E*TRADE Financial Corp.	ETFC	5.44	2	N	6	12 months	10%	-36.7%	-57.2%	-76%	1.44	0.42	0.90	3.8x	13.0x	6.0x	0.5x	0.0%
optionsXpress Holdings, Inc.	OXPS	29.26	2	B	30	12 months	3%	4.3%	5.3%	29%	1.15	1.48	1.70	25.5x	19.7x	17.3x	6.8x	0.9%
TradeStation Group, Inc.	TRAD	11.83	1	N	14	12 months	14%	3.6%	-2.8%	-14%	0.67	0.79	0.90	17.5x	15.0x	13.1x	3.6x	0.0%
TD Ameritrade Holding Corp.	AMTD	19.38	12	B	23	12 months	16%	8.1%	2.2%	20%	0.95	1.06	1.27	20.5x	18.3x	15.2x	5.4x	0.0%
The Charles Schwab Corp.	SCHW	23.58	30	N	26	12 months	10%	6.1%	5.0%	22%	0.69	0.92	1.18	34.0x	25.8x	20.0x	7.6x	0.8%
<b>Discount/Online Average</b>							<b>11%</b>	<b>-2.9%</b>	<b>-9.5%</b>	<b>-3.8%</b>				<b>20.3x</b>	<b>18.3x</b>	<b>14.3x</b>	<b>4.8x</b>	<b>0.3%</b>
Evercore Partners Inc.	EVR	24.69	1	N	30	12 months	22%	-3.9%	-6.0%	-33%	1.27	1.43	1.80	19.4x	17.3x	13.7x	5.7x	1.9%
Greenhill & Co., Inc.	GHL	72.39	2	N	79	12 months	9%	6.1%	5.1%	-2%	2.55	4.05	4.25	28.3x	17.9x	17.0x	9.3x	2.1%
Jefferies Group Inc.	JEF	24.39	4	N	35	12 months	44%	1.2%	-6.2%	-9%	1.41	1.55	1.75	17.3x	15.7x	13.9x	1.6x	2.1%
Lazard Ltd.	LAZ	43.97	5	B	63	12 months	43%	-3.2%	-5.4%	-7%	2.23	2.70	3.25	19.7x	16.3x	13.5x	NA	0.8%
Piper Jaffray Companies Inc.	PJC	44.47	1	N	61	12 months	37%	1.5%	-15.0%	-32%	3.12	2.40	3.05	14.3x	18.6x	14.6x	0.8x	0.0%
Raymond James Financial, Inc.	RJF	31.46	4	N	36	12 months	14%	-2.8%	-8.3%	4%	1.85	2.11	2.40	17.0x	14.9x	13.1x	2.1x	1.3%
Thomas Weisel Partners	TWPG	13.18	0	S	16	12 months	21%	-5.1%	-13.5%	-38%	0.99	0.73	0.93	13.4x	18.0x	14.2x	1.2x	0.0%
<b>Smid-Cap Broker Average</b>							<b>27%</b>	<b>-0.9%</b>	<b>-7.1%</b>	<b>-16.7%</b>				<b>18.5x</b>	<b>17.0x</b>	<b>14.3x</b>	<b>3.5x</b>	<b>1.2%</b>

**Target Price Methodology and Risk:**
**Universal and Investment Bank**

Price Target Methodology: Priced Targets are derived based on PEG or PB analysis.

Risks: 1) Key risks include an economic downturn and uncertainty around financial stocks in particular.

**Discount/Online**

Price Target Methodology: Priced Targets are derived based on PEG or PB analysis.

Risks: Key risk include decrease in DART activity level caused by an economic slowdown and weaker market.

**Smid-Cap Broker**

Price Target Methodology: Priced Targets are derived based on PEG or PB analysis.

Risks: Key risks include a slow down in equities and competition from higher capitalized firms.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

**Exhibit 79: Financials comp table – ASSET MANAGERS AND MARKET STRUCTURE**  
 as of November 16, 2007

ASSET MANAGERS								Price Pfmnce			GS EPS Estimate			Valuation				
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06 P/E	07 P/E	08 P/E	07E P/B	Div Yield
Affiliated Managers Group, Inc.	AMG	124.55	5	B	153	12 months	23%	3.3%	-5.5%	18%	5.65	6.83	8.00	22.0x	18.2x	15.6x	8.0x	0.0%
INVESCO plc	IVZ	26.65	11	N	30	12 months	13%	-1.5%	-6.2%	8%	1.24	1.70	1.99	21.5x	15.7x	13.4x	2.2x	1.4%
AllianceBernstein Holding L.P.	AB	76.49	7	B	99	12 months	29%	2.6%	-12.4%	-5%	4.03	4.60	5.50	19.0x	16.6x	13.9x	3.9x	6.3%
BlackRock, Inc.	BLK	192.24	13	B	240	12 months	25%	0.5%	4.4%	27%	5.35	7.80	9.75	35.9x	24.6x	19.7x	1.1x	1.4%
Calamos Asset Management, Inc.	CLMS	29.96	1	N	32	12 months	7%	-7.1%	-0.1%	12%	1.44	1.26	1.50	20.7x	23.8x	20.0x	3.5x	1.5%
Cohen & Steers, Inc.	CNS	31.28	1	N	40	12 months	28%	-3.0%	-19.4%	-22%	1.29	1.86	2.10	24.3x	16.8x	14.9x	4.5x	2.6%
Eaton Vance Corp.	EV	46.27	7	N	43	12 months	-7%	3.3%	10.2%	40%	1.26	1.33	2.09	36.6x	34.8x	22.1x	12.9x	1.3%
Federated Investors, Inc.	FII	39.43	4	B	45	12 months	14%	-1.4%	-2.9%	17%	1.84	2.23	2.62	21.4x	17.7x	15.0x	7.9x	2.1%
Franklin Resources, Inc.	BEN	118.95	31	N	146	12 months	23%	1.5%	-11.8%	8%	5.42	7.07	8.16	22.0x	16.8x	14.6x	4.0x	0.5%
Gamco Investors, Inc.	GBL	57.79	2	S	48	12 months	-17%	5.6%	-2.3%	50%	2.38	2.89	3.22	24.3x	20.0x	17.9x	3.2x	0.2%
Janus Capital Group Inc.	JNS	34.2	7	N	33	12 months	-4%	-2.3%	5.1%	58%	0.67	1.06	1.44	51.1x	32.2x	23.7x	5.0x	0.1%
Legg Mason, Inc.	LM	71.73	8	N	89	12 months	24%	-1.0%	-13.5%	-25%	8.71	4.52	5.20	8.2x	15.9x	13.8x	1.5x	1.3%
Fortress Investment Group LLC	FIG	17.12	7	B	21	12 months	23%	-1.7%	-22.6%	na	0.58	1.02	1.20	29.4x	16.8x	14.3x	14.4x	5.3%
T. Rowe Price Group, Inc.	TROW	64.7	18	N	62	12 months	-4%	10.4%	15.1%	48%	1.90	2.35	2.85	34.1x	27.6x	22.7x	5.9x	1.1%
W.P. Stewart & Co., Ltd	WPL	5.96	0	S	6	12 months	1%	13.1%	-31.9%	-62%	0.91	0.09	0.07	6.6x	65.2x	89.2x	2.9x	8.9%
Waddell & Reed Financial, Inc.	WDR	32.95	3	N	32	12 months	-3%	0.9%	16.4%	20%	1.32	1.50	1.85	24.9x	22.0x	17.8x	10.2x	2.1%
<b>Asset Manager Average</b>							<b>11%</b>	<b>1.5%</b>	<b>-4.8%</b>	<b>12.8%</b>				<b>25.1x</b>	<b>24.0x</b>	<b>21.8x</b>	<b>5.7x</b>	<b>2.2%</b>

MARKET STRUCTURE								Price Pfmnce			GS EPS Estimate			Valuation				
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06 P/E	07 P/E	08 P/E	07E P/B	Div Yield
CME Group Inc.	CME	652.75	36	B	700	12 months	7%	0.9%	5.2%	28%	11.60	15.15	19.50	56.3x	43.1x	33.5x	2.4x	0.5%
NYSE Euronext, Inc.	NYX	85.01	23	N	105	12 months	24%	-3.6%	5.5%	-13%	1.64	2.57	3.40	51.7x	33.1x	25.0x	2.7x	1.2%
eSpeed, Inc.	ESPD	9.99	1	S	9	12 months	-10%	-2.6%	-2.5%	14%	0.15	0.07	0.09	68.1x	146.2x	110.1x	2.0x	0.0%
GFI Group Inc.	GFIG	94.24	3	N	100	12 months	6%	1.3%	12.9%	51%	2.34	3.30	4.10	40.2x	28.6x	23.0x	6.2x	0.0%
IntercontinentalExchange, Inc.	ICE	175.04	12	B	188	12 months	7%	5.8%	12.6%	62%	2.40	3.43	5.25	72.8x	51.0x	33.3x	8.6x	0.0%
International Securities Exchange	ISE	67.05	3	N	67.5	6 months	1%	-0.1%	0.6%	43%	1.43	1.95	2.25	47.0x	34.4x	29.7x	8.2x	0.3%
Investment Technology Group, Inc.	ITG	41.34	2	N	53	12 months	28%	4.8%	-0.1%	-4%	2.05	2.36	2.90	20.2x	17.5x	14.3x	2.5x	0.0%
Knight Capital Group, Inc.	NITE	13.04	1	B	18	12 months	38%	2.0%	-2.5%	-32%	1.36	0.92	1.15	9.6x	14.2x	11.3x	1.3x	0.0%
LaBranche & Co. Inc.	LAB	4.99	0	S	5.5	3 months	10%	-8.9%	-2.2%	-49%	0.02	0.00	0.10	265.7x	nm	50.5x	0.6x	0.0%
MarketAxess Holdings Inc.	MKTX	15.85	1	N	18	12 months	14%	2.9%	5.9%	17%	0.15	0.32	0.42	102.6x	49.7x	38.1x	3.0x	0.0%
The Nasdaq Stock Market, Inc.	NDAQ	41.94	6	N	46	12 months	10%	1.7%	4.3%	36%	0.95	3.40	2.10	44.1x	12.3x	20.0x	2.4x	0.0%
TSX Group, Inc.	X.TO	50.14312	3	N	59	12 months	18%	0.4%	4.5%	5%	2.09	2.39	2.71	24.0x	21.0x	18.5x	24.3x	3.1%
<b>Market Structure Average</b>							<b>13%</b>	<b>0.4%</b>	<b>3.7%</b>	<b>13.4%</b>				<b>66.9x</b>	<b>41.0x</b>	<b>33.9x</b>	<b>5.7x</b>	<b>0.5%</b>

**Target Price Methodology and Risk:**
**Asset Manager**

Price Target Methodology: All price targets are derived from discounted cash flow (DCF) models.

Risks: 1) deceleration in equity markets 2) unexpected slow-down in flows and 3) uses of excess capital on balance sheet

**Market Structure**

Price Target Methodology: Price targets are derived from DCF-derived target P/E multiples.

Risks: The biggest long-term risk that we see to our price target is sustained deceleration in trading volume, which would likely lead investors to conclude that the period of high growth is over and revalue the stocks.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

**Exhibit 80: Financials comp table – LIFE INSURANCE**  
 as of November 16, 2007

LIFE INSURANCE								Price Pfmnce			GS EPS Estimate			Valuation			
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06E P/B	07E P/B	07E P/E	Div Yield
AFLAC Inc.	AFL	60.66	30	N	57	6 months	-6%	2.6%	6.0%	32%	2.85	3.29	3.80	4.3x	3.8x	18.4x	1.4%
Ameriprise Financial, Inc.	AMP	58.5	14	B	68	6 months	16%	1.5%	-10.2%	7%	3.35	3.87	4.60	1.7x	1.7x	15.1x	1.0%
Assurant Inc.	AIZ	65.67	9	B	72	6 months	10%	3.5%	16.9%	19%	4.68	5.55	6.00	2.2x	1.9x	11.8x	0.7%
Conseco Inc.	CNO	13.9	2	N	16	6 months	15%	0.8%	-10.5%	-30%	0.54	-0.15	1.20	0.5x	0.6x	-91.7x	0.0%
Genworth Financial, Inc.	GNW	25.56	12	B	36	6 months	41%	0.7%	-13.1%	-25%	2.81	3.05	3.12	0.9x	0.9x	8.4x	1.6%
Lincoln National Corp.	LNC	59.76	10	N	73	6 months	22%	-1.2%	-9.6%	-10%	5.15	5.50	6.15	1.4x	1.3x	10.9x	2.8%
MetLife Inc.	MET	63.97	47	B	74	6 months	16%	-0.5%	-5.4%	8%	5.21	6.10	6.35	1.6x	1.4x	10.5x	1.2%
National Financial Partners	NFP	47.9	2	N	52	6 months	9%	-4.3%	-13.1%	9%	2.61	2.82	3.50	2.4x	2.4x	17.0x	1.8%
Nationwide Financial Services	NFS	48.02	7	N	60	6 months	25%	-2.0%	-11.8%	-11%	4.70	4.73	4.75	1.3x	1.2x	10.1x	2.2%
Principal Financial Group, Inc.	PFG	66.31	19	N	66	6 months	0%	1.5%	5.0%	13%	3.53	4.12	4.53	2.8x	2.5x	16.1x	1.4%
Protective Life Corp.	PL	42.76	3	N	52	6 months	22%	-3.6%	-1.6%	-10%	3.39	4.03	4.30	1.3x	1.2x	10.6x	2.1%
Prudential Financial, Inc.	PRU	97.73	52	B	107	6 months	9%	4.7%	-0.7%	14%	6.15	7.65	8.25	2.1x	2.0x	12.8x	1.2%
StanCorp Financial Group, Inc.	SFG	51.42	3	N	51	6 months	-1%	-5.1%	1.5%	14%	3.70	4.30	4.60	1.9x	1.8x	12.0x	1.4%
Torchmark Corp.	TMK	62.23	6	S	63	6 months	1%	-2.0%	-2.0%	-2%	4.99	5.43	5.85	1.9x	1.7x	11.5x	0.8%
<b>Life Insurance Average</b>							<b>13%</b>	<b>-0.2%</b>	<b>-3.5%</b>	<b>1.9%</b>				<b>1.9x</b>	<b>1.7x</b>	<b>5.2x</b>	<b>1.4%</b>
MGIC Investment Corp.	MTG	21.84	2	N	19	12 months	-13%	2.5%	-29.3%	-65%	6.68	-2.64	-5.81	0.4x	0.5x	-8.3x	0.5%
Radian Group Inc.	RDN	12.46	1	N	12	12 months	-4%	-1.3%	-42.2%	-77%	6.62	-3.02	-0.48	0.2x	0.3x	-4.1x	0.6%
The PMI Group, Inc.	PMI	12.65	1	N	18	12 months	42%	-15.0%	-57.1%	-73%	4.59	0.09	-0.86	0.3x	0.3x	134.8x	1.7%
<b>Mortgage Insurance Average</b>							<b>9%</b>	<b>-4.6%</b>	<b>-42.9%</b>	<b>-71.7%</b>				<b>0.3x</b>	<b>0.3x</b>	<b>40.8x</b>	<b>0.9%</b>

**Target Price Methodology and Risk:**
**Life Insurance**

Target price methodology for all life stocks: Based on 6-month risk-adjusted residual income valuation (RIVA).

Key risks for life target prices: AMP, LNC, PFG, and PRU- Equity market performance; AFL- weaker than expected US or Japan sales; AIZ- Impact of catastrophes; CNO- Inability to meet the hurdles that A.M. Best outlined; GNW, PL, SFG and UNM- Adverse loss experience; MET- Volatility in variable income; NFP- Weakness in acquisition activity; NFS- Buybacks and equity market performance; TMK- Continued sales and distribution challenges.

**Mortgage Insurance**

Target price methodology from mortgage stocks: Based on 12-month P/E, P/B risk/reward analysis.

Risks to price targets: Could include unemployment, home price appreciation, and weaker than expected credit trends.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

**Exhibit 81: Financials comp table – NON-LIFE INSURANCE**  
 as of November 16, 2007

NON-LIFE INSURANCE								Price Pfmnce			GS EPS Estimate			Valuation			
Name	Ticker	Price	Mkt Cap \$bn	Rating	Target Price	Target Period	Upside/Downside	1 wk	1 mos	YTD	2006	2007	2008	06E P/B	07E P/B	07E P/E	Div Yield
Aspen Insurance Holdings Ltd.	AHL	28.29	3	N	33	12 months	17%	5.4%	-1.4%	7%	3.82	5.00	4.35	1.3x	1.1x	5.7x	2.7%
Endurance Specialty Holdings Ltd.	ENH	38.03	2	B	50	12 months	31%	-2.1%	-6.6%	4%	6.98	7.30	6.65	1.3x	1.1x	5.2x	2.6%
Everest Re Group Limited	RE	100.4	6	B	130	12 months	29%	-0.9%	-8.7%	2%	12.52	14.50	15.50	1.3x	1.1x	6.9x	1.9%
RenaissanceRe Holdings Ltd.	RNR	57.13	4	B	75	12 months	31%	-0.4%	-10.3%	-5%	11.05	10.00	10.00	1.7x	1.3x	5.7x	1.5%
IPC Holdings, Ltd.	IPCR	29.46	2	N	34	12 months	15%	1.4%	5.2%	-6%	5.37	3.95	4.80	1.1x	1.0x	7.5x	2.7%
Validus Holdings, Ltd.	VR	25.52	2	B	33	12 months	29%	-1.4%	0.6%	na	3.13	5.35	4.90	na	na	4.8x	0.0%
Platinum Underwriters Holdings	PTP	35.76	2	N	41	12 months	15%	1.8%	-0.5%	16%	4.79	5.15	4.90	1.3x	1.1x	6.9x	0.9%
Transatlantic Holdings Inc.	TRH	72.92	5	N	82	12 months	12%	-0.5%	2.1%	17%	6.36	7.25	7.25	1.6x	1.4x	10.1x	0.9%
Arch Capital Group Ltd.	ACGL	68.3	6	N	88	12 months	29%	-1.1%	-7.4%	1%	9.59	11.15	11.60	1.6x	1.2x	6.1x	0.0%
PartnerRe Ltd.	PRE	80.68	5	N	90	12 months	12%	-1.2%	0.6%	14%	11.56	12.45	10.45	1.4x	1.2x	6.5x	2.1%
XL Capital Ltd.	XL	63.2	11	N	90	12 months	42%	-2.3%	-17.9%	-12%	9.83	11.45	9.95	1.2x	1.0x	5.5x	2.4%
ACE Limited	ACE	58.16	19	N	73	12 months	26%	-0.6%	-5.0%	-4%	7.05	7.95	7.80	1.4x	1.2x	7.3x	1.8%
Allied World Assurance Co. Hldgs. Ltd.	AWH	46.16	3	B	58	12 months	26%	2.6%	-9.9%	6%	8.26	7.85	6.85	1.3x	1.1x	5.9x	1.4%
<b>Reinsurance Predominating Avg</b>							<b>24%</b>	<b>0.1%</b>	<b>-4.6%</b>	<b>3.3%</b>				<b>1.4x</b>	<b>1.1x</b>	<b>6.5x</b>	<b>1.6%</b>
The Allstate Corp.	ALL	52.64	31	N	64	12 months	22%	-0.9%	-8.5%	-19%	7.67	7.05	6.75	1.5x	1.4x	7.5x	2.9%
The Progressive Corporation	PGR	18.21	14	S	20	12 months	10%	-0.8%	-5.3%	-25%	2.11	1.54	1.30	2.0x	2.3x	11.8x	0.2%
Safeco Corp.	SAF	55.37	6	N	65	12 months	17%	1.8%	-8.5%	-11%	6.67	6.20	6.75	1.5x	1.4x	8.9x	2.9%
<b>Personal Lines Predominating Avg</b>							<b>16%</b>	<b>0.0%</b>	<b>-7.4%</b>	<b>-18.5%</b>				<b>1.7x</b>	<b>1.7x</b>	<b>9.4x</b>	<b>2.0%</b>
American International Group	AIG	56.44	147	B	78	12 months	38%	-1.1%	-14.8%	-21%	5.82	6.15	6.95	1.4x	1.3x	9.2x	1.4%
The Travelers Companies, Inc.	TRV	52.72	35	N	63	12 months	19%	2.6%	0.8%	-2%	5.90	7.00	7.15	1.4x	1.2x	7.5x	2.2%
The Hartford Financial Services	HIG	93	30	N	115	12 months	24%	1.6%	-2.1%	0%	9.07	11.00	11.00	1.6x	1.5x	8.5x	2.3%
Chubb Corp.	CB	53.31	21	N	65	12 months	22%	3.3%	-1.6%	1%	5.60	6.35	5.95	1.6x	1.4x	8.4x	2.2%
HCC Insurance Holdings	HCC	29.88	3	N	39	12 months	31%	1.8%	-1.2%	-7%	2.94	3.50	3.50	1.6x	1.4x	8.5x	1.5%
CNA Financial Corp.	CNA	34.98	10	S	43	12 months	23%	0.6%	-8.8%	-13%	3.90	4.18	4.35	1.0x	0.9x	8.4x	1.7%
Markel Corp.	MKL	483.54	5	N	560	12 months	16%	-3.8%	-4.1%	1%	35.27	35.30	29.50	2.1x	1.8x	13.7x	0.0%
<b>Commercial Lines Predominating Avg</b>							<b>25%</b>	<b>0.7%</b>	<b>-4.5%</b>	<b>-6.0%</b>				<b>1.5x</b>	<b>1.4x</b>	<b>9.2x</b>	<b>1.6%</b>
Aon Corp.	AOC	47.56	16	N	50	12 months	5%	1.7%	6.1%	35%	2.23	3.04	3.39	3.7x	2.7x	15.7x	1.3%
Arthur J. Gallagher & Co.	AJG	26.47	3	N	26	12 months	-2%	0.7%	-7.6%	-10%	1.40	1.54	1.62	2.7x	2.9x	17.2x	4.7%
Marsh & McLennan Companies	MMC	25.37	14	S	24	12 months	-5%	1.6%	-0.8%	-17%	1.47	1.15	1.55	2.3x	2.3x	22.0x	3.0%
Willis Group Holdings Ltd.	WSH	39.13	6	N	42	12 months	7%	-0.1%	-3.6%	-1%	2.22	2.68	2.89	4.1x	4.6x	14.6x	2.6%
<b>Insurance Brokers</b>							<b>1%</b>	<b>1.0%</b>	<b>-1.5%</b>	<b>1.4%</b>				<b>3.2x</b>	<b>3.1x</b>	<b>17.4x</b>	<b>2.9%</b>

**Target Price Methodology and Risk:**
**Non-life Insurance**

Target price methodology for all non-life stocks: Based on 12-month compilation of Relative P/E, PB, ROE-cost of equity, and DCF.

Risks to price targets: Could include a more competitive pricing environment, adverse legislative or regulatory developments, and catastrophe activity.

Source: Goldman Sachs Quantum, Goldman Sachs Research.

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