From: Kevin Coffey

Christopher Calabia; Arthur Angulo To: Subject: Fw: Goldman Report on AIG 08/19/2008 06:33 PM Date:

GS AIG Outlook More Capital Needed - 08 18 08.pdf Attachments:

Fyi - the attached report from GS hits on many of the key point confronting AIG. Title is "Don't buy AIG"...

Sent from my BlackBerry Handheld.

▼ Ira Seliq

---- Original Message -----

From: Ira Selig
Sent: 08/18/2008 06:28 PM EDT

To: Kevin Coffey; NY MKT DCM Staff; Alejandro LaTorre;

matthew.rutherford@do.treas.gov Subject: Goldman Report on AIG

> Much of the analysis focuses on losses in the Financial Products' group, which is home to its giant CDS portfolio. Additionally, the analysts focus on the potential for the ratings agencies to downgrade AIG, which could result in AIG needing to post additional collateral muni guarantee products as well as other derivatives. (see page 4) The analysts also worked through valuation scenarios for the company based on capital raises of between \$15 and \$37.5 billion and various stock price levels (page 5).

### With regard to AIGFP:

The bottom line: large scale cash outflows and posting of collateral could substantially weaken AIG's balance sheet. We believe that the rating agencies would force AIG to raise a large, dilutive amount of equity capital to: (1) plug the holes left by such cash outflows, and (2) prevent significant downgrades to avoid any further triggering of collateral calls and termination payments.

Some of the areas of concern listed include:

- (1) Economic losses on the multi-sector CDO book could be between \$9 and \$20 billion.
- (2) Management does not yet believe it is likely to incur large scale economic losses. If management is not yet on board with the likelihood of large economic losses in this portfolio...
- (3) ...then neither may be the rating agencies.
- (4) The idea of physical settlement in AIG's CDS is often overlooked. Given the very

substantial amount of cash AIG could be forced under the terms of its contracts to

purchase protected securities at par, we are concerned with the lack of discussion around

this topic by the firm and the rating agencies. Our understanding is that if AIG provided

protection on a \$1,000 security with an event of default, AIG would have to pay \$1,000 to

the holder of the security and then take physical possession of the

security. Thus, a \$1,000 security with a \$100 loss does not imply a \$100 cash outlay – in fact, it implies a \$1,000 cash outlay in receipt of \$900 of collateral.

(5) It is very difficult to quantify the potential losses from the rest of the FP noise.



GS AIG Outlook More Capital Needed - 08\_18\_08.pdf

### **COMPANY UPDATE**

# American International Group (AIG)

Neutral

# Don't buy AIG: potential downgrades, capital raise on the horizon

#### What's changed

We recommend investors stay on the sidelines with AIG, as the potential for a capital raise and/or ratings downgrades becomes increasingly likely. We base our view on the downward spiral which is likely to ensue as more actual cash losses emanate from the FP segment. Specifically, we foresee \$9-\$20 billion in economic losses from the CDS book, which could result in larger cash outlays (for the physical settlement of the underlying CDOs), resulting in a significant shift in the risk quality of AIG's assets (i.e., exchanging cash and short-term securities for mortgage collateral), forcing rating agencies downgrades, and resulting in large-scale capital raises. Consequently, we are concerned over: (1) the potential damage to employee morale and a subsequent drain of intellectual capital, and (2) the impairment of counterparty confidence in AIG, which could result in loss of business and market share. Although many may take the view that unrealized losses will ultimately exceed economic losses, and thus the investment thesis should be based on AIG's long-term prospects, we believe this overlooks the important and troubling near-term risks.

#### **Implications**

After another surprisingly negative quarter, it appears that investor confidence in AIG is damaged. We believe the stock may continue to drift down as investors remain wary of the possibility of a dilutive capital raise, the potential for ratings downgrades, and the corresponding effects on the underlying business. Put simply, we have seen this credit overhang story before with another stock in our coverage universe, and foresee outcomes similar in nature but on a much larger scale.

#### Valuation

We lower our 12-month BV multiple-based price target to \$23 from \$30.

The key risks to our price target are even larger losses to the CDS book.

#### INVESTMENT LIST MEMBERSHIP

Neutral

### Coverage View: Neutral

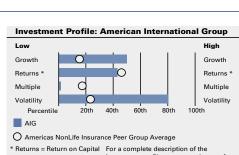
United States: Insurance

Thomas V. Cholnoky (212) 902-3408 | thomas.cholnoky@gs.com Goldman, Sachs & Co. Christopher M. Neczypor

7-8512 | christopher.neczypor@gs.com Goldman, Sachs & Co.

Eric J. Fraser (212) 902-2303 | eric.fraser@gs.com Goldman, Sachs & Co.

Christopher Giovanni (212) 357-3560 | christo -3560 | christopher.giovanni@gs.com Goldman, Sachs & Co.



the disclosure section of this document.

Price (\$)				22.99
12 month price target (\$)				23.00
Market cap (\$ mn)				61,815.8
Net debt/equity (%)				-
	12/07	12/08E	12/09E	12/10
N \				
Net premiums (\$ mn)	45,682.0	47,417.9	48,129.2	49,573.
Op. income (\$ mn)	9,308.0	(959.3)	11,888.3	13,455.0
EPS (\$)	3.58	(0.37)	4.40	4.9
P/E (X)	6.4	NM	5.2	4.0
P/B (X)	1.5	0.8	0.7	0.0
ROE (%)	9.3	(1.1)	13.9	14.
	6/07	9/08E	12/08E	3/09
EPS (\$)	1.77	0.66	0.79	1.0

Key data



Share price performance (%)	3 month	6 month	12 month
Absolute	(41.9)	(50.1)	(63.6)
Rel. to S&P 500	(36.3)	(48.2)	(60.6)
Source: Company data Goldman Sache Bosons			

The Goldman Sachs Group, Inc. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Customers in the US can receive independent, third-party research on companies covered in this report, at no cost to them, where such research is available. Customers can access this independent research at available. Customers can access this independent research at www.independentresearch.gs.com or call 1-866-727-7000. For Reg AC certification, see the text preceding the disclosures. For other important disclosures go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not required to take the NASD/NYSE analyst exam.

# **American International Group: Summary financials**

Non-life Net premiums written				12/10E	Balance sheet (\$ mn)	12/07	12/08E	12/09E	12/10
•									
Mark and a Process and a second	47,067.0	47,302.3	48,484.9	50,424.3	Total investments	851,961.0	894,487.3	981,988.9	1,109,076
Net premiums earned	45,682.0	47,417.9	48,129.2	49,573.1	Cash	2,284.0	2,284.0	2,284.0	2,284
Losses	(29,982.0)	(33,951.2)	(34,460.5)	(35,370.4)	Total investments and cash	854,245.0	896,771.3	984,272.9	1,111,360
Expenses	(11,627.0)	(12,724.3)	(13,187.9)	(13,665.0)					
					Accrued investment income	6,587.0	5,924.8	6,613.9	7,233
Loss ratio (%)	65.6	71.6	71.6	71.4	Premiums receivable	18,395.0	18,487.0	18,949.1	19,707
Expense ratio (%)	24.7	26.9	27.2	27.1	Reinsurance recoverable	23,103.0	27,193.7	28,553.4	29,981
Combined ratio (%)	90.3	98.5	98.8	98.5	Insurance balances receivable	41,498.0	45,680.7	47,502.6	49,688
(7.7)						,	,	,	,
Policyholder dividends					Other receivables				
Other underwriting income/(expenses)	427.0	(28.9)	88.9	212.8	DAC	43,150.0	44,876.0	46,222.3	47,608
Non-life underwriting income (pretax)	4,500.0	713.5	569.7	750.5	Total goodwill and intangibles	9,414.0	9,414.0	9,414.0	9,414
					Other assets	26,927.0	27,817.4	28,714.3	29,618
nvestment income (pretax)	6,132.0	4,721.6	5,193.8	5,531.4	Separate account assets	78,684.0	85,213.3	92,284.4	99,942
					Total assets	1,060,505.0	1,115,697.4	1,215,024.4	1,354,865
Non-life pretax operating earnings	10,632.0	5,435.1	5,763.5	6,281.9					
	-	•	•	-	Future policy benefits	136,068.0	150,112.0	164,104.3	177,759
Other					Policyholder account balances	271,058.0	288,685.1	308,707.4	332,573
Life pretax operating earnings	10,584.0	10,584.0	11,854.1	13,098.8	Policyholder reserves	407,126.0	438,797.0	472,811.8	510,333
	10,304.0	10,304.0	11,004.1	13,030.0	Unpaid loss and late reserves	85,500.0			
Annuity pretax operating earnings	(0.040.0)	(44.500.4)	0.500.0	4 470 0	•		93,139.0	98,170.9	103,454
Asset mgmt pretax operating earnings	(6,819.0)	(14,536.4)	3,560.8	4,172.0	Unearned premium reserves	28,022.0	29,142.9	30,017.2	30,917
Oth. & corp. pretax operating earnings	(1,430.0)	(3,360.0)	(3,200.0)	(3,200.0)	Other balances payable	17,512.0	17,843.3	17,963.4	18,154
					Preferred and other securities	0.0	0.0	0.0	0
Cons. operating income (pretax)	12,967.0	(1,877.3)	17,978.4	20,352.7	LT debt	162,935.0	162,935.0	162,935.0	162,935
Provision for taxes	(2,387.0)	1,468.0	(4,890.1)	(5,637.7)	ST debt	13,114.0	13,114.0	13,114.0	13,114
Operating income before minorities	10,580.0	(409.3)	13,088.3	14,715.0	Total debt	176,049.0	176,049.0	176,049.0	176,049
Minority interest	(1,272.0)	(550.0)	(1,200.0)	(1,260.0)	Other liabilities	89,746.0	110,990.1	154,183.8	232,464
Dividends (pref and capital securities)					Separate account liabilities	78,684.0	85,213.3	92,284.4	99,942
Operating income	9,308.0	(959.3)	11,888.3	13,455.0	Total liabilities	964,604.0	1,033,139.6	1,123,445.5	1,253,280
Operating income per diluted share (\$)	3.58	(0.37)	4.40	4.95	Preferred shares	100.0	100.0	100.0	100.
					Paid in capital	(3,837.0)	(5,748.9)	(5,748.9)	(5,748.
Realized gains/(losses)	(2,804.0)	(7,982.0)	0.0	0.0	Accumulated income/(loss)	3,731.0	3,731.0	3,731.0	3,731
Discontinued operations	(2,004.0)	(7,002.0)			Total common equity	95,801.0	82,457.8	91,478.9	101,484
Non-recurring	0.0	0.0	0.0	0.0	Minority interest	0.0	0.0	0.0	0
					•				
Accounting changes	(304.0)	(298.0)	0.0	0.0	Total shareholders' equity	95,901.0	82,557.8	91,578.9	101,584
Net income	6,200.0	(9,239.3)	11,888.3	13,455.0					
Oiluted average shares (mn)	2,598.0	2,609.5	2,705.0	2,716.0	Total liabilities & equity	1,060,505.0	1,115,697.4	1,215,024.4	1,354,865.

#### **Analyst Contributors**

Thomas V. Cholnoky

thomas.cholnoky@gs.com

Christopher Giovanni christopher.giovanni@gs.com

Christopher M. Neczypor

christopher.neczypor@gs.com

Eric J. Fraser

eric.fraser@gs.com

# A dangerous balance sheet posing as an inexpensive entry point

While AIG shares may appear intriguing at current levels, we caution investors that many uncertainties remain. Even though our analysis of AIG's Financial Products (FP) exposures appears to indicate that economic losses may fall short of the unrealized losses it has incurred to date, we also believe that investors need to consider other factors that could cause near-term pain for the company. The biggest of these are possible rating agency actions that could result in further downgrades and incremental dilutive capital raises. Interestingly, the rating agencies also appear to agree that the economic losses are not likely to exceed the charges that the company has incurred. However, we believe that investors need to balance the possibility of near-term hits to capital as opposed to simply focusing on where ROEs may be two or three years from now. Below, we highlight some of the issues that could cause more near-term volatility.

# There's nothing to be feared except fear itself...and mortgages

The central tenet of our "Don't buy AIG" argument is simple: the intricacies of AIG's business are so complex that management may not even know the extent of the company's ultimate exposures, let alone losses. We note that each quarter's disclosures continue to provide incrementally concerning information regarding dangerous exposures. We offer two examples from the most recent quarter:

- (1) Protection that AIG wrote on deals which it believed did not contain risk transfer (i.e., the regulatory capital transactions) are now experiencing losses (specifically the \$1.6 billion notional transaction with a fair value loss of \$125 million). While this loss is not material to AIG's balance sheet, the simple fact that the previous disclosure referred to the portfolio from which this transaction pertained as: "written for financial institutions...for the purpose of providing regulatory capital relief rather than risk mitigation," (i.e., implying zero expected losses) is now a tainted statement. Although the company has successfully terminated a large number of these regulatory capital deals, we are concerned about the possibility of future losses emanating from this previous described "safe" portfolio. Specifically, if a bank has purchased protection from AIG, the initial motivation may make no difference if the agreement covers losses, AIG will have to pay.
- (2) The "worst case" scenario for the losses on the multi-sector CDOs has significantly jumped from \$900 million at 4Q2007, to \$1.2-\$2.4 billion at 1Q2008 to now \$5 billion to \$8.5 billion. While few investors may have believed the \$900 million or \$1-\$2 billion figures, it appeared at the time that management was fully confident in these numbers. While we do not believe there was an attempt to mislead investors with any of these disclosures, the fact remains that the sheer complexity of such exposures continues to surprise management.

Thus, if management cannot accurately assess its ultimate exposures or losses, then how can one expect the rating agencies to do so?

### Between a rock and a hard place

We believe the ratings agencies are in a very perilous position when it comes to AIG. Downgrades to AIG's credit or financial strength ratings (see Exhibit 1) would trigger collateral calls and accelerated payments (see Exhibit 2), damage to the insurance operations (see Exhibit 3), and increased costs for raising the capital that will be necessary to bolster the firm's balance sheet strength. Following what were very negative second-quarter results, we were somewhat surprised to see a lack of action by S&P, Moody's or

AM Best. Specifically, both S&P and Moody's re-affirmed AIG's financial strength and senior long-term debt ratings. S&P appears to have given the company "a pass" until the third quarter:

"The outlook on AIG remains negative, which implies that there is a meaningful chance of a one-notch downgrade. If earnings do not stabilize by the third quarter, then a downgrade of one notch is likely."

There is very little to suggest that the mortgage market will stabilize in the next six weeks, which indicates that third-quarter earnings could once again be volatile. However, we believe S&P's statement avoids the true issue: the ratings agencies are hoping that "new" management finds a way to cleanly dispose of the FP overhang – a hope that we believe may be futile (see the section below on "Our view of hurdles to removing the overhang"). Thus, with the inevitable large-scale cash call which would accompany losses from FP (see the section below "Calling all cash: Please report to AIGFP"), the rating agencies are likely putting off the inevitable.

**Exhibit 1: Current ratings** 

Sr Long Term Debt Outlook	Moody's Aa3 Neg	S&P AA- Neg	Fitch AA- Neg	A.M. Best
Financial Strength	Aa2	AA+	AA+	A+
Outlook	Neg	Neg	Neg	Neg

Source: Goldman Sachs Research, company data, Moody's, S&P, Fitch, A.M. Best.

Exhibit 2: Impact on AIGFP's outstanding muni GIA and other derivative transactions ratings downgrades and potential for collateral calls and termination payments

Downgrade:	Collateral:
Sr Debt to both A1 and A+	\$13.3bn
Sr Debt to both A2 and A	Additional \$1.2bn
Sr Debt to either A1 or A+	\$10.5bn
Sr Debt to either A2 or A	Additional \$1.1bn
Downgrade:	Early termination payments:
Sr Debt to both A1 and A+	\$4.6bn
Sr Debt to both A2 and A	Additional \$0.8bn

Source: Goldman Sachs Research, company data.

Exhibit 3: Potential rating downgrades impact on underlying fundamentals

	Effect of a Potential Downgrade:
Life Insurance	Biggest impact to AIG's institutional spread business and market leading fixed annuity product as consumers could question its ability to meet guarantees as a single A-rated company, likely resulting in competitors gaining market share from AIG. The in force block should remain fairly stable as should its ability to sell variable products.
General Insurance	Ra ings downgrades could provide an opportunity for competitors to gain access to AIG's market share as clients could potentially direct new and renewal business to higher rated ins itutions. AIG could be removed from approved security lists. Underwriters could depart in search of a higher rated platform from which to write business.
Securities Lending	If securities borrowers decide not to roll based on lenders' credit ratings, AIG might have to liquidate (potentially risky) assets to generate the cash to return to borrowers, hus raising the potential for capital hits. AIG is said to be one of the more risky securities lending insurance participants.
AIG FP	Certain derivatives are subject to collateral posting provisions in the event of a downgrade. In addition, downgrades could lead to potential termination payments.
Aircraft Leasing	Impact to higher cost of funding.
Holding Company	Higher funding costs related to debt issuance.

Source: Goldman Sachs Research.

### Raising capital: Ultimate number too difficult to quantify

We do not attempt to predict the size of the eventual capital raise, as there is currently no roadmap for how the rating agencies will view the large cash outflows we believe could occur, as we detail in the next section. Given the evolving nature of the economic environment compounding the extremely complex nature of AlG's full exposures, we believe it is extremely difficult to quantify the ultimate amount of capital the company may need. Specifically, we believe the amount of capital that AlG may ultimately have to raise will depend on: (1) the amount of cash losses from FP, (2) the amount of cash it may use for the physical settlements of the CDOs within FP, and (3) the amount it may need to to bolster its insurance subsidiaries' balance sheets after AlG's MBS assets fully reflect both the actual losses and the post-downgrade deterioration within regulators' risk-based-capital models.

While we explore these issues in further detail below, we note that two things are clear: (1) the cash outlays will be large and (2) the rating agencies will ultimately dictate the level of capital the company may need to cover such losses. "The rating agencies today are the governor of how much capital we have and how much capital we need." – Bob Willumstad, 2Q2008 conference call. In Exhibit 4, we calculate a pro-forma tangible book value per share based on different capital raising scenarios.

Exhibit 4: Pro-forma tangible book value per share (y: equity raise, x: share price) \$ millions, price per share

	\$ 16.00	\$ 17.00	\$ 18.00	\$ 19.00	\$ 20.00	\$ 21.00	\$ 22.00	\$ 23.00	\$ 24.00	\$ 25.00
15,000	22.73	23.08	23.40	23.70	23.97	24.22	24.45	24.67	24.87	25.06
17,500	22.45	22.84	23.20	23.53	23.83	24.11	24.37	24.62	24.85	25.06
20,000	22.20	22.62	23.01	23.37	23.70	24.01	24.30	24.57	24.82	25.06
22,500	21.96	22.41	22.83	23.22	23.58	23.91	24.23	24.52	24.80	25.06
25,000	21.74	22.22	22.67	23.08	23.46	23.82	24.16	24.48	24.77	25.05
27,500	21.54	22.04	22.51	22.95	23.36	23.74	24.10	24.44	24.75	25.05
30,000	21.35	21.88	22.37	22.83	23.26	23.66	24.04	24.40	24.73	25.05
32,500	21.17	21.72	22.23	22.71	23.16	23.59	23.98	24.36	24.72	25.05
35,000	21.00	21.57	22.11	22.61	23.07	23.52	23.93	24.33	24.70	25.05
37,500	20.85	21.44	21.99	22.50	22.99	23.45	23.88	24.29	24.68	25.05

Source: Goldman Sachs Research estimates.

# Calling all cash: Please report to AIGFP

At the root of this tough love is AIGFP. Yes, AIG's total investment portfolio is fairly troublesome and yes, United Guaranty is certainly in the middle of its own "1 in 250 year" storm – but ultimately we believe AIG would have emerged from this storm beaten but not broken, had FP not been a part of the picture. Now as we assess the landscape over the next twelve to eighteen months, all roads to recovery start at the house of FP. Here are the potential issues as we see it:

(1) Economic losses on the multi-sector CDO book could be between \$9 and \$20 billion. We accept that this is a wide range, but one that we derived using 3 scenarios of increasing cumulative loss estimates (see Exhibit 5). We note that some investors may point out that even our worst-case \$20 billion cash loss is less than the write-downs the company has taken to date. However, we believe this view misses the big picture – being

such large scale cash losses will bring about large scale capital raising (which brings us to our next point).

- (2) Management does not yet believe it is likely to incur large scale economic losses. On its 202008 conference call, management stated: "We think if you look at our assumptions, especially in our rolls and our loss severities, we think right now the five [billion] is probably is a very, very conservative estimate, and the 8.5 [billion] would be even much more stressed. So we don't think we are going to get to those numbers." Thus, if management is not yet on board with the likelihood of large economic losses in this portfolio...
- (3) ...then neither may be the rating agencies. Concerns over earnings volatility have been the primary stated focus by the rating agencies up until this point, an issue that is certainly of valid concern. Much more importantly, however, will be the multi billion dollar cash outflows which will ultimately come due. We expect much larger pressure on the agencies to downgrade the company when the reality of the CDS losses becomes more evident.
- (4) The idea of physical settlement in AIG's CDS is often overlooked. Given the very substantial amount of cash AIG could be forced under the terms of its contracts to purchase protected securities at par, we are concerned with the lack of discussion around this topic by the firm and the rating agencies. Our understanding is that if AIG provided protection on a \$1,000 security with an event of default, AIG would have to pay \$1,000 to the holder of the security and then take physical possession of the security. Thus, a \$1,000 security with a \$100 loss does not imply a \$100 cash outlay - in fact, it implies a \$1,000 cash outlay in receipt of \$900 of collateral. Given the "securities" in this example are mostly CDOs and the "collateral" is largely mortgage-based, we suspect the regulators and the rating agencies will not look kindly on AlG's swapping cash for mortgage assets. Of even more concerning relevance, the majority of the CDS written on CDOs require this form of physical settlement. To wit (from SEC filings): "While the credit default swaps written on corporate debt obligations are cash settled, the majority of the credit default swaps written on CDOs and CLOs require physical settlement. Under a physical settlement arrangement, AIGFP would be required to purchase the referenced super senior security at par in the event of a non-payment on that security." Thus the cash loss of \$9-\$20 billion in the CDS book would not necessarily be the cash outlay - the outlay could be much larger (i.e., if a \$10 billion loss represents a 40% loss on par, the cash outlay would be \$25 billion).
- (5) It is very difficult to quantify the potential losses from the rest of the FP noise. Specifically, we are concerned with the following:
- 2a-7 Puts: AIG is party to put option agreements with current total of exposure of \$11.3 billion of super senior securities backed by CMBS that require the company to repurchase these obligations in the event that the issuer fails to remarket the securities. Of \$7.5 billion issued over the last year, AIG issued \$2.1 billion of these puts in November of 2007 and the balance in June 2008. If a counter-party exercises a put, AIG would be able to receive funding, but may have to hold the securities for as long as three to six years. We note that AIG incurred \$810 million of unrealized losses in the second quarter as a result of changes in market value of the puts. Any future exercises of these put options could further burden AIG.
- Protection on mezzanine tranches: Despite all of the commentary regarding the "high quality" nature of AIG's super senior portfolio, buried in the footnotes of the SEC filings is the following: "AIGFP also wrote protection on tranches below the super senior risk layer. At June 30, 2008 the notional amount of the credit default swaps in the regulatory capital relief portfolio written on tranches below the super senior risk layer was \$5.8 billion, with an estimated fair value loss of \$171 million."

• Over-collateralization provisions: A number of the CDS in FP contain over-collateralization provisions which could force AIG to purchase the underlying CDOs at par, should the provisions not be satisfied. According to the 10-Q, there is an aggregate notional amount of \$8.2 billion which contain such provisions. Additionally, "AIGFP cannot currently quantify its obligations which might occur in the future under these provisions, or determine the timing of any purchases that might be required. Therefore, there can be no assurance that satisfaction of these obligations by AIGFP will not have a material effect on the manner in which AIG manages its liquidity."

The end result of the above is unclear. Without further disclosure as to the specific nature of the securities with such provisions, or the underlying collateral in the mezzanine tranches, or the exact events which allow the puts to become in the money, it is difficult to quantify a loss or estimate the potential impact to capital.

- (6) AIG could be forced to repay positions in its Guaranteed Investment Agreements ("GIAs") book: certain downgrades of AIG's debt ratings could force the firm to post collateral or repay its positions. While AIG discloses and quantifies this incremental amount of collateral (aggregated for both the GIA and "financial derivative transactions"), it does not disclose the amount of assets currently under management in this book. Thus, there is a specific risk that AIG's invested assets are under water relative to the book value of the assets, and thus deficient in fair value relative to the obligation to the municipalities. If AIG has to terminate such liabilities without holding the assets to recovery, it could result in further realized investment losses. Alternatively, there is the chance that the company could repay such liabilities with more liquid securities or cash, but without the detail as to how much in GIA assets and liabilities are currently on AIG's books, we cannot assess the likelihood of either scenario. We note that the risk associated with this business is reminiscent of the securities lending misstep (see Securities Lending subsection below).
- (7) Collateral calls and termination payments could be required: Along with the collateral requirements of the GIA book, other "financial derivative transactions" contain provisions that permit AIGFP's counterparties to elect early termination of contracts which could result in payments of \$4.6 to \$5.4 billion. Clearly, immediate payments of such amounts could further weaken AIG's balance sheet.

The bottom line: large scale cash outflows and posting of collateral could substantially weaken AIG's balance sheet. We believe that the rating agencies would force AIG to raise a large, dilutive amount of equity capital to: (1) plug the holes left by such cash outflows, and (2) prevent significant downgrades to avoid any further triggering of collateral calls and termination payments.

# Calculating the Cash Loss to FP:

In order to derive an assumed economic loss to AIGFP's portfolio, we concentrated on the data that AIG disclosed related to the underlying collateral within the multi-sector CDOs.

- We utilized Goldman Sachs Financials Research industry loss assumptions by product, by vintage as a starting point.
- We then allowed for two stress case scenarios in which we increased default assumptions across all product lines by 100 bp and 250 bp.
- We also assumed certain subordination levels for typical product structures (i.e. subprime RMBS, CMBS, et al.) as based on "average" structures over the past few years.

- Then we applied (rather simplistically) an assumption that the cumulative industry losses by product would flow evenly up through the structures, impairing the structure from a "first loss" bottoms-up perspective.
- Next we assumed typical high grade CDO collateral of AA and A tranches, and typical mezzanine CDO collateral of BBB and BB.
- Lastly, we applied the average attachment points for AIG in such CDOs to derive a net loss. We note that we have not incorporated any assumption for present value when determining losses (i.e. such cash outlays could be "lower" if loss payments occur over a long period of time).

**Step 1 - Cumulative Loss Assumptions**: Below we highlight the base case estimates for cumulative loss estimates by product, by vintage. We then apply two stress case scenarios by increasing default assumptions by 100 bp and 250 bp (note: for the collateral which is other CDOs, we increase loss assumptions by 1000 bp). Note the next two charts (Exhibits 5 and 6) are not AIG-specific but rather starting points for estimating how losses flow throughout products.

Exhibit 5: Cumulative loss estimates by product by vintage Industry loss estimates

BASE CASE CUN	IULATIVE	LOSS	STIMA	ΓES	
US Subprime	2003	2004	2005	2006	2007
Losses					
Cumulative defaults	6.9%	8.1%	11.8%	38.0%	35.7%
Loss at default	27.0%	31.0%	45.0%	60.0%	60.0%
Cumulative losses (assumed)	1.9%	2 5%	5.3%	22.8%	21.4%
US Alt-A	2003	2004	2005	2006	2007
Losses					
Cumulative defaults	21.4%	24.1%	28.2%	33.2%	32.9%
Loss at default	10.0%	15 0%	20.0%	25.0%	30.0%
Cumulative losses (assumed)	2.1%	3.6%	5.6%	8.3%	9.9%
US Prime	2003	2004	2005	2006	2007
Losses					
Cumulative defaults	12.8%	13.8%	15.7%	19.4%	20.0%
Loss at default	0.1%	0.9%	1.7%	2.5%	3.3%
Cumulative losses (assumed)	0.0%	0.1%	0.3%	0.5%	0.7%
US CRE	2003	2004	2005	2006	2007
Losses					
Cumulative defaults	4.6%	5.1%	14.3%	21.2%	22.1%
Loss at default	13.6%	39.3%	45.0%	47.5%	50.0%
Cumulative losses (assumed)	0.6%	2.0%	6.5%	10.1%	11.1%

STRESS SCENARIOS GIVEN INCREASES TO DEFAULT ASSUMPTIONS									
Base Case: GS est	2003	2004	2005	<u>2006</u>	2007				
Subprime	1.88%	2.51%	5.29%	22.82%	21.42%				
Alt-A	2.14%	3.62%	5.65%	8.29%	9.86%				
Prime	0.01%	0.12%	0.27%	0.48%	0.66%				
CRE	0.62%	2.01%	6.45%	10.09%	11.06%				
CDO collateral	25.00%	50.00%	100.00%	100.00%	100.00%				
Scenario 2: + 100 bps	2003	2004	2005	2006	2007				
Subprime	2.15%	2.82%	5.74%	23.42%	22.02%				
Alt-A	2.24%	3.77%	5.85%	8.54%	10.16%				
Prime	0.01%	0.13%	0.28%	0.51%	0.69%				
CRE	0.76%	2.40%	6.90%	10.57%	11.56%				
CDO collateral	35.00%	60.00%	100.00%	100.00%	100.00%				
Scenario 3: + 250 bps	2003	2004	2005	2006	2007				
Subprime	4.38%	5.01%	7.79%	25.32%	23.92%				
Alt-A	4.64%	6.12%	8.15%	10.79%	12.36%				
Prime	2.51%	2.62%	2.77%	2.98%	3.16%				
CRE	3.12%	4.51%	8.95%	12.59%	13.56%				
CDO collateral	45.00%	70.00%	100.00%	100.00%	100.00%				

Source: Goldman Sachs Research estimates.

Exhibit 6: Assumed losses by product, given average subordination levels percent loss of tranche, by structure

Subprime		Tranche		7	/intage		
MBS		Size	2003	2004	2005	2006	2007
	AAA	79.3%	0.0%	0.0%	0.0%	2.1%	0.7%
	AA	6.6%	0.0%	0.0%	0.0%	6.6%	6.6%
	Α	5.4%	0.0%	0.0%	0.0%	5.4%	5.4%
	BBB	4.3%	0.0%	0.0%	0.9%	4.3%	4.3%
	BB	2.6%	0.1%	0.7%	2.6%	2.6%	2.6%
	Equity	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	TOTAL	100.0%	1.9%	2.5%	5.3%	22.8%	21.4%

IAIL-A	Hanche		viiitage				
MBS	Size		2004	2005	2006	2007	
AAA	93.0%	0 0%	0.0%	0 0%	1.3%	2.9%	
AA	2.4%	0 0%	0.0%	1 0%	2.4%	2.4%	
A	1.8%	0 0%	0.8%	1 8%	1.8%	1.8%	
BBB	1.2%	0 5%	1.2%	1 2%	1.2%	1.2%	
ВВ	1.0%	1 0%	1.0%	1 0%	1.0%	1.0%	
Equity	0.6%	0 6%	0.6%	0 6%	0.6%	0.6%	
TOTAL	100.0%	2.1%	3.6%	5.6%	8.3%	9.9%	

Prime / Other		Tranche		7	/intage		
MBS		Size	2003	2004	2005	2006	2007
	AAA	79.3%	0.0%	0.0%	0.0%	0.0%	0.0%
	AA	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%
	Α	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%
	BBB	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
	ВВ	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
	Equity	1.8%	0.0%	0.1%	0.3%	0.5%	0.7%
	TOTAL	100.0%	0.0%	0.1%	0.3%	0.5%	0.7%

CMBS	Tranche		7	/intage		
	Size	2003	2004	2005	2006	2007
AAA	88.0%	0 0%	0.0%	0 0%	0.0%	0.0%
AA	2.5%	0 0%	0.0%	0 0%	0.6%	1.6%
Α	2.3%	0 0%	0.0%	0 0%	2.3%	2.3%
BBB	2.9%	0 0%	0.0%	2 2%	2.9%	2.9%
ВВ	2.8%	0 0%	0.5%	2 8%	2.8%	2.8%
Equity	1.5%	0 6%	1.5%	1 5%	1.5%	1.5%
TOTAL	100.0%	0.6%	2.0%	6.5%	10.1%	11.1%

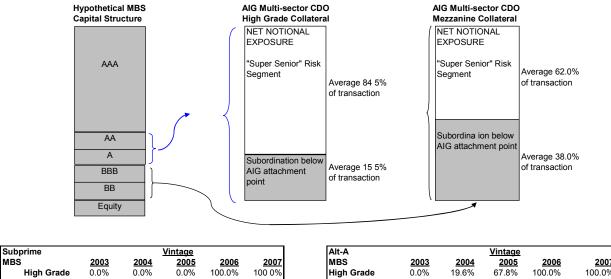
Source: Goldman Sachs Research estimates.

Step 2 - Estimating the loss by security: In Exhibit 7 we apply the loss assumptions above to different tranches of the structured products which provide the collateral for AIGFP's multi-sector CDOs. Specifically, we assume the cumulative losses from Exhibit 5 flow through the tranches on a first loss basis (i.e., equity is affected first, then BB layers, then BBB, etc). We then assume certain tranches flow into the different grades of CDOs protected by AIG (i.e., the collateral of an average high grade CDO will be AA and A securities, the collateral for an average mezzanine CDO will be BBB and BB, etc).

A 14 A

Exhibit 7: Assumed loss path for underlying collateral

Using Base Case loss assumptions from above. This model is also repeated with stress case losses with results in Exhibit 9.



Mezzanine	1.1%	10.3%	50.6%	100.0%	100 0%	Mezzanine	70.1%	100.0%	100.0%	100.0%	100.0
	1.170	10.070	00.070	100.070	100 0 70		70.170	100.070	100.070	100.070	100.0
Prime / Other			Vintage			CMBS			Vintage		
MBS	2003	2004	2005	2006	2007		2003	2004	2005	2006	200
High Grade	0.0%	0.0%	0.0%	0.0%	0 0%	High Grade	0.0%	0.0%	0.0%	60.3%	80.4
Mezzanine	0.0%	0.0%	0.0%	0.0%	0 0%	Mezzanine	0.0%	9.0%	86.9%	100.0%	100.0
						<u> </u>					

Source: Goldman Sachs Research estimates.

2007

• As an example, we calculate 43.7% loss to AA tranches in 2005 Alt-A MBS. This is calculated assuming: (1) an estimated 5.6% cumulative loss for the 2005 Alt-A market (see Exhibit 6), and (2) first-loss characteristics of the Alt-A structures implying that all of the equity layer (0.6% of the security), BB layer (1.0% of the security), BBB layer (1.2% of the security), and A layer (1.8% of the security) are gone (combined 4.6% loss to security), with the remaining "1.0%" (or 5.6% less the 4.6%) of cumulative loss impairing ~44% of the AA's average 2.4% tranche.

**Step 3: Applying loss assumptions to AIG portfolio:** In Exhibit 8 we highlight the loss assumptions applied to AIG's disclosed collateral within the multi-sector CDO portfolio. Specifically, for the high grade collateral, we apply the loss percentages to the AA and A tranches from above, by vintage year. Similarly, we apply the loss percentages to BBB and BB for the mezzanine CDO collateral.

Exhibit 8: Base Case loss estimates applied to AIGFP multi-sector portfolio \$ billions, loss % of gross exposure

CDS Exposures:						CDS Exposures: Mezzanine Multi-sector CDOs				
<u>Collateral</u>	9	6 of GNE	\$ bil	loss %	loss \$	<u>Collateral</u>	% of GNE	<u>\$ bil</u>	loss %	loss \$
Sub-prime		47.5%	25.2	11.6%	2.92	Sub-prime	63.6%	18.8	42.9%	8.04
Alt-A		16.1%	8.5	60.7%	5.18	Alt-A	10.2%	3.0	100.0%	3.01
Other RMBS		11.8%	6.3	0.0%	-	Other RMBS	7.2%	2.1	0.0%	-
CDO		15.2%	8.1	72.0%	5.80	CDO	6.4%	1.9	78.1%	1.48
CMBS		6.8%	3.6	8.1%	0.3	CMBS	7.5%	2.2	54.3%	1.2
Other ABS		2.4%	1.3	10.0%	0.1	Other ABS	4.2%	1.2	10.0%	0.1
Non-ABS		0.2%	0.1	10.0%	0.0	Non-ABS	0.9%	0.3	10.0%	0.0
	_	100.0%	53.0	27.0%	14.33	•	100.0%	29.5	47.0%	13.88
By Vintage:						By Vintage:				
Sub-prime:						Sub-prime:				
	Pre-04	2.6%	1.4	0.0%	-	Pre-04	3.3%	1.0	1.1%	0.0
	2004	14.0%	7.4	0.0%	-	2004	17.8%	5.3	10.3%	0.5
	2005	25.4%	13.5	0.0%	-	2005	34.6%	10.2	50.6%	5.2
	2006	2.7%	1.4	100.0%	1.4	2006	4.4%	1.3	100.0%	1.3
	2007	2.8%	1.5	100.0%	1.5	2007	3.5%	1.0	100.0%	1.0
	_	47.5%	25.2	11.6%	2.9	•	63.6%	18.8	42.9%	8.0
Alt-A						Alt-A				
	Pre-05	3.7%	2.0	19.6%	0.4	Pre-05	4.4%	1.3	100.0%	1.3
	2005	10.4%	5.5	67.8%	3.7	2005	4.5%	1.3	100.0%	1.3
	2006	1.5%	8.0	100.0%	0.8	2006	1.0%	0.3	100.0%	0.3
	2007	0.5%	0.3	100.0%	0.3	2007	0.3%	0.1	100.0%	0.1
	-	16.1%	8.5	60.7%	5.2	•	10.2%	3.0	100.0%	3.0
Other RMBS						Other RMBS				
	Pre-05	4.7%	2.5	0.0%	-	Pre-05	3.9%	1.2	0.0%	-
	2005	5.7%	3.0	0.0%	-	2005	2.6%	0.8	0.0%	-
	2006	1.0%	0.5	0.0%	-	2006	0.4%	0.1	0.0%	_
	2007	0.5%	0.3	0.0%	-	2007	0.2%	0.1	0.0%	-
	-	11.9%	6.3	0.0%		•	7.1%	2.1	0.0%	-
CMBS						CMBS				
	Pre-05	2.5%	1.3	0.0%	-	Pre-05	3.2%	0.9	9.0%	0.1
	2005	3.4%	1.8	0.0%	-	2005	3.3%	1.0	86.9%	0.8
	2006	0.6%	0.3	60.3%	0.2	2006	0.7%	0.2	100.0%	0.2
	2007	0.3%	0.1	80.4%	0.1	2007	0.3%	0.1	100.0%	0.1
	_	6.8%	3.6	8.2%	0.3	•	7.5%	2.2	55.0%	1.2
CDOs						CDOs				
	Pre-05	8.7%	4.6	50.0%	2.3	Pre-05	2.8%	8.0	50.0%	0.4
	2005	4.8%	2.5	100.0%	2.5	2005	2.6%	0.8	100.0%	0.8
	2006	1.5%	0.8	100.0%	0.8	2006	0.8%	0.2	100.0%	0.2
	2007	0.3%	0.2	100.0%	0.2	2007	0.2%	0.1	100.0%	0.1
	-	15.3%	8.1	71.6%	5.8		6.4%	1.9	78.1%	1.5

Source: Goldman Sachs Research estimates.

Step 4: Apply subordination levels to gross loss figures to determine cash loss. Using the disclosed average subordination levels for both the high-grade CDOs and the mezzanine CDOs, we then "attached" AIG to the losses above such levels. In other words, if the gross exposure was \$1,000, the subordination was 20%, and the loss was 40%, AIG is assumed to only have a \$200 cash loss. We then applied this exercise for each of the three loss scenarios. See Exhibit 9.

Exhibit 9: Estimated economic loss assuming average subordination levels \$ billions

HG	Mezz	AIG
53.0	29.5	82.5
43.1	17.5	60.6
15.5%	38.0%	23.6%
45	58	103
	53.0 43.1 15.5%	53.0 29.5 43.1 17.5 15.5% 38.0%

Base Case:	HG	Mezz	AIG
Base Case: AIG Economic Loss:	6.11	2.67	8.78

Stress Case 1:	HG	Mezz	AIG
AIG Economic Loss:	6.95	3.83	10.78

Stress Case 2:	HG	Mezz	AIG
AIG Economic Loss:	10.77	9.60	20.37

Source: Goldman Sachs Research estimates.

# Hurdles to removing the overhang

The prospect of a large-scale removal of the mortgage overhang is likely fueling the optimistic fire of employees, regulators, rating agencies, and certain shareholders. Specifically, we believe it is likely that the rating agencies are waiting for results of the strategic review (to be announced at the September 25 investor day), with hopes that AIG can shed some portion of the FP exposures. We struggle to paint a clear picture as to how management could achieve such an outcome. We have concerns with the following theories:

- (1) The "Ambac Argument": In this theory, AIGFP would pay a certain amount to its counterparties to commute the protection it has provided, thus incurring a large cash loss but removing the overhang. Our problem with this theory is the fact that AIG has historically chosen the highest-quality counterparties. In other words, Ambac was able to pay about \$850 million to commute a \$1.4 billion exposure because its counterparty, Citi, was willing to do so. AIG, on the other hand, is more likely to have also provided protection to those who are less likely to need capital and thus may be more patient in waiting out the loss. Said differently, if a counterparty is not in a position of weakness, why would it accept anything less than the full amount of protection for which it had paid?
- (2) The "Buffet / Lone Star Argument": In this theory, AIGFP would find a willing buyer of its exposures, to which AIG would pay an amount (effectively to backstop) that is more than the ultimate economic loss to AIG but less than the current unrealized markdowns, thus allowing the investor to accrete the valuation disconnect over time. Again, AIG theoretically would be able to take a substantial cash charge but reverse a large amount of the current unrealized losses and accordingly remove the overhang. Our issue with this theory is twofold: (1) we struggle to highlight an investor who would be willing to take on

such substantial risk when the ultimate losses are by no means certain, and (2) why would AlG's counterparties trade a \$1 trillion balance sheet that is backstopping the insurance they purchased for anything else? Presumably AlG would not be able to sell its obligations without the consent of its counterparties, and thus we find the fruition of this theory unlikely.

(3) The "Buy-in Argument": In this theory, AIG would repurchase the multi-sector CDOs at par, exchanging \$50-\$60 billion in cash for the CDOs. This scenario assumes that AIG would take an aggressive write-down to eliminate potential future write-downs, but would ultimately stand to benefit from any recovery. While this investment thesis may work in the academic sense of the world, we struggle to envision the acceptance of the regulators and rating agencies in which a company with no excess capital trades in \$50 - \$60 billion worth of cash for mortgage assets.

The bottom line: those waiting for the kitchen sink may get flushed down the drain.

# Other issues of concern: not a comprehensive list

### Investments: Losses will emerge, but downgrades are the problem

The issue of losses in AlG's investment portfolio is as potentially troublesome as the losses in FP. While much has been written about the firm's subprime portfolio (\$16.3 billion or 24% of tangible book), Alt-A portfolio (\$16.4 billion or 24% of tangible book), HELOC and Second-Lien RMBS portfolio (\$2.6 billion or 4% of tangible book), *et al.*, we continue to believe the full fallout has yet to be recognized. Given the sheer size of AlG's mortgage-related investment assets (\$106.2 billion including both residential and commercial), even a relatively minor loss realization could potentially impair capital to a significant extent.

Although we do not focus significantly on the issue of potential losses on AlG's investment portfolio for the purpose of this report, our analysis and conclusions are similar to our work on the FP book: (1) large-scale losses in excess of the markdowns AlG has taken to date are possible but not inevitable, while (2) we have not yet seen the full ramifications of rating agency actions as it relates to this issue. Besides actual ultimate impairments to AlG's securities, we believe the biggest issue facing the firm is: (1) to what extent the AAA MBS assets are downgraded by the rating agencies when the subordination is gone, and thus (2) how do the regulators/NAIC assess the degree of credit given in the risk-based-capital models, and thus (3) how much capital will AlG need to inject into affected operating subsidiaries to bolster the statutory surplus.

### Fundamentals: The mirage of 15% growth and 15% ROE

The underlying thesis for the bull case is typically one based on an eventual return to the "15% growth / 15% ROE" of the past. While we are hesitant to be outright negative on such a view, we believe the market should not take for granted such high aspirations. Specifically, over the past six months (and to some extent even the past few years), the results of AlG's underlying insurance operations have been uninspiring. While the purpose of this note is to explore our concerns over the potential fallout still to come from the mortgage mess, it is necessary to at least briefly highlight the concerns with the underlying insurance operations – and the issues which prevent us from being outright bulls even in the "medium term".

#### Property and Casualty: The Bigger You Are, The Harder You Fall

So far this year, AIG's P&C operations have been hit by the triple play of insurance woes: (1) declining margins driven by increasing accident-year loss ratios and substantial reserve strengthening, (2) much lower investment income, as the past few years' growth has been driven by partnership and other alternative investment gains which have all but dried up, and (3) premium volumes have been flat to down as rate-driven growth opportunities evaporate in the softening market. Any investor who follows the insurance space understands these are not AIG-specific issues; however, the sheer size of AIG's market share causes the sheer size of the market's problems to be painful for the firm.

Specific to AIG, however, are a few items of concern. The most notable of which is the fact that AIG continues to add to older accident-year reserves – an important point of reference given almost every other company in our universe is largely in a position of net reserve releases. This is concerning because strengthening appears to not only be for the problematic late 1990s underwriting years (an industry-wide period of disaster), but also for years up to 2003, which according to peers, should prove to be one of the most profitable years in the industry's history. On the second-quarter conference call, management attempt to explain the continued overall strengthening by citing its large market share, saying peers don't "have an excess casualty book the size of what we had."

Even putting aside the under-pricing of the past, AIG is experiencing deteriorating trends in its bread and butter "core" general insurance business. This year's commercial business profitability has been negatively affected by reduced premium volume (not uncommon to peers) in addition to increased catastrophe/large risk losses from the Midwest US floods, fires, etc. However, largely specific to AIG, the expense ratio continues to pick up, with the former CEO referring to AIG's addition of 24,000 employees over the past few years (albeit firm wide) as "the equivalent of two Army divisions." A certain part of AIG's historic outperformance in terms of ROEs and earnings growth has been tied to the efficient manner in which it kept expenses below industry averages. Some would argue that the recent investments in certain areas (i.e., accounting, legal, etc.) which have driven the expense ratio higher are the very areas which, had they been properly invested in historically, may have been able to prevent the problems we have seen over the past six years. We do not disagree with this assessment, but simply acknowledge that such necessary expenses could, in the future, hinder a return to such above-average performance.

Lastly, we remain concerned about the near-to-medium term outlook for a number of specific product areas. The personal lines business continues to show deteriorating underwriting performance with combined ratios over 100%, owing – it seems – to increased auto loss severity and frequency driving prior-year adverse loss development. Further, integration costs remain for 21st Century, an acquisition which, while small in scope relative to AlG's balance sheet, does not come without integration and execution risk. More importantly, AlG's mortgage guaranty business continues to experience losses of a catastrophic nature. While previously a very minor contribution to AlG's earnings, UGC's losses (292% loss ratio in 2Q) contributed 5 points to the overall company's loss ratio in the second quarter, with no end in sight to the pain.

Life Insurance: Better prospects in the long run, but challenged in the near term Through the first half of 2008 life insurance earnings have decreased 5% largely due to the 10% decline in operating earnings in the second quarter. Earnings weakness has been driven by lower net investment income (-2%) and higher expenses. Again, investment income has suffered from partnership income, mutual funds, and trading account losses. Increased expenses have been seen in both benefits paid (+11%) and higher acquisition and other operating expenses (+14%). On a consolidated level, one of the bright spots has

been premium income increasing 14%, though roughly half has benefited from favorable foreign currency.

On the revenue side, we expect lower levels of investment income to remain for the balance of the year for many of the same reasons mentioned above. The recent uncertainty in equity markets has shifted growth to fixed annuities, with the expectation of weak variable annuity sales to continue for the remainder of the year. This however could prove a bright spot for AIG, given its market leading position in fixed annuities (again, assuming no rating downgrades).

Despite the 11% increase in benefits paid to date, benefits could still accelerate in the back half of the year as AIG has experienced favorable mortality in its domestic life insurance business – i.e., a return to expected levels (or unfavorable) would further pressure life insurance earnings. Lower amortization of DAC in domestic retirement services from realized capital losses occurred in both the first and second quarters and with the decline in investment returns AIG could potentially have a DAC recoverability issue (AIG reviews its DAC assumptions on a comprehensive basis and performs any large-scale unlockings in the fourth quarter). On the second-quarter call, management noted that if equity markets continue to decline it "could potentially necessitate unlocking" in its domestic variable annuities. While still too early to predict the ultimate impact, the second half of this year will likely continue to be pressured.

## Securities Lending: Still a problem

AIG, like many other insurance companies, lends out a portion of large security holdings to various investors and financial institutions. In return, AIG receives collateral from counterparties, which it invests in various asset classes to earn a spread. In an effort to increase returns, the duration of these assets often exceeds that of the liabilities because many companies choose to renew their contracts and roll over the extended dates. However, due to AIG's aggressive investment strategy into riskier classes, the current market value of the assets stood at \$59.5 billion as compared with liabilities of \$75.1 billion. Exhibit 10 shows the distribution of the assets and their respective credit ratings. As a result of the shortfall in the market value of assets relative to liabilities, during the quarter, AIG agreed to "deposit into the securities pool an amount equal to the investment losses realized by the pool in connection with sales of impaired securities, up to \$5 billion" (per SEC filings).

Exhibit 10: Securities lending: asset quality still a concern \$ millions

				BBB/ Not	Short-	
	AAA	AA	<u>A</u>	Rated	<u>Term</u>	<u>Total</u>
Corporate debt	696	7,407	3,557	1,245	_	12,905
MBS, ABS, and collateralized	30,933	3,170	437	1,640	-	36,180
Cash and short term investments	-	-	-	-	10,445	10,445
Total	31,629	10,577	3,994	2,885	10,445	59,530

Source: Goldman Sachs Research, company data.

# Reg AC

We, Thomas V. Cholnoky and Christopher M. Neczypor, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

# Investment profile

The Goldman Sachs Investment Profile provides investment context for a security by comparing key attributes of that security to its peer group and market. The four key attributes depicted are: growth, returns, multiple and volatility. Growth, returns and multiple are indexed based on composites of several methodologies to determine the stocks percentile ranking within the region's coverage universe.

The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

**Growth** is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

# Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

# **Disclosures**

### Coverage group(s) of stocks by primary analyst(s)

Thomas V. Cholnoky: America-Lifelnsure, America-NonLifelnsurance. Christopher M. Neczypor: America-Insurance Brokers, America-NonLifelnsurance.

America-Insurance Brokers: Aon Corp., Arthur J. Gallagher & Co., Marsh & McLennan Companies, Willis Group Holdings Ltd..

America-Lifelnsure: AFLAC Inc., Assurant Inc., Lincoln National Corp., MetLife Inc., Principal Financial Group, Inc., Prudential Financial, Inc.,

America-NonLifeInsurance: ACE Limited, Allied World Assurance Co. Hldgs. Ltd., The Allstate Corp., American International Group, Arch Capital Group Ltd., Aspen Insurance Holdings Ltd., Chubb Corp., CNA Financial Corp., Endurance Specialty Holdings Ltd., Everest Re Group Limited, The Hartford Financial Services, HCC Insurance Holdings, IPC Holdings, Ltd., Markel Corp., PartnerRe Ltd., Platinum Underwriters Holdings, The Progressive Corporation, RenaissanceRe Holdings Ltd., Safeco Corp., The Travelers Companies, Inc., Transatlantic Holdings Inc., Validus Holdings, Ltd., XL Capital Ltd..

### Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs has received compensation for investment banking services in the past 12 months: American International Group (\$21.60)

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: American International Group (\$21.60)

Goldman Sachs has received compensation for non-investment banking services during the past 12 months: American International Group (\$21.60)

Goldman Sachs had an investment banking services client relationship during the past 12 months with: American International Group (\$21.60)

Goldman Sachs had a non-investment banking securities-related services client relationship during the past 12 months with: American International Group (\$21.60)

Goldman Sachs had a non-securities services client relationship during the past 12 months with: American International Group (\$21.60)

Goldman Sachs makes a market in the securities or derivatives thereof: American International Group (\$21.60)

Goldman Sachs is a specialist in the relevant securities and will at any given time have an inventory position, "long" or "short," and may be on the opposite side of orders executed on the relevant exchange: American International Group (\$21.60)

#### Distribution of ratings/investment banking relationships

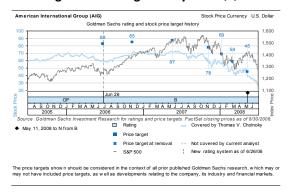
Goldman Sachs Investment Research global coverage universe

Rating Distribution Investment Banking Relationships

	Buy	Hold	Sell	Buy	Hold	Sell
Global	28%	57%	15%	50%	46%	40%

As of July 1, 2008, Goldman Sachs Global Investment Research had investment ratings on 3,006 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by NASD/NYSE rules. See 'Ratings, Coverage groups and views and related definitions' below.

#### Price target and rating history chart(s)



### Regulatory disclosures

#### Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; market making and/or specialist role.

The following are additional required disclosures: **Ownership and material conflicts of interest**: Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation**: Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director**: Goldman Sachs policy prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director, advisory board member or employee of any company in the analyst's area of coverage. **Distribution of ratings**: See the distribution of ratings disclosure above. **Price chart**: See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at http://www.gs.com/research/hedge.html. Goldman, Sachs & Co. is a member of SIPC(http://www.sipc.org).

#### Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. Canada: Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research in Canada if and to the extent it relates to equity securities of Canadian issuers. Analysts may conduct site visits but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits. Hong Kong: Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. India: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited; Japan: See below. Korea: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. Russia: Research reports distributed in the Russian Federation are not advertising as defined in Russian law, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian Law on Appraisal. Singapore: Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). Taiwan: This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor, **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Services Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

**European Union:** Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/126/EC is available at http://www.gs.com/client\_services/global\_investment\_research/europeanpolicy.html

Japan: Goldman Sachs Japan Co., Ltd. Is a Financial Instrument Dealer under the Financial Instrument and Exchange Law, registered with the Kanto Financial Bureau (Registration No. 69), and is a member of Japan Securities Dealers Association (JSDA) and Financial Futures Association of Japan (FFJAJ). Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

### Ratings, coverage groups and views and related definitions

Buy (B), Neutral (N), Sell (S) - Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's return potential relative to its coverage group as described below. Any stock not assigned as

a Buy or a Sell on an Investment List is deemed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular coverage group may vary as determined by the regional Investment Review Committee. Regional Conviction Buy and Sell lists represent investment recommendations focused on either the size of the potential return or the likelihood of the realization of the return.

**Return potential** represents the price differential between the current share price and the price target expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage groups and views: A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. Attractive (A). The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. Neutral (N). The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. Cautious (C). The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Not Rated (NR). The investment rating and target price, if any, have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. Rating Suspended (RS). Goldman Sachs Research has suspended the investment rating and price target, if any, for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. Coverage Suspended (CS). Goldman Sachs has suspended coverage of this company. Not Covered (NC). Goldman Sachs does not cover this company. Not Available or Not Applicable (NA). The information is not available for display or is not applicable. Not Meaningful (NM). The information is not meaningful and is therefore excluded.

#### Ratings, coverage views and related definitions prior to June 26, 2006

Our rating system requires that analysts rank order the stocks in their coverage groups and assign one of three investment ratings (see definitions below) within a ratings distribution guideline of no more than 25% of the stocks should be rated Outperform and no fewer than 10% rated Underperform. The analyst assigns one of three coverage views (see definitions below), which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and valuation. Each coverage group, listing all stocks covered in that group, is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html.

#### Definitions

Outperform (OP). We expect this stock to outperform the median total return for the analyst's coverage universe over the next 12 months. In-Line (IL). We expect this stock to perform in line with the median total return for the analyst's coverage universe over the next 12 months. Underperform (U). We expect this stock to underperform the median total return for the analyst's coverage universe over the next 12 months.

Coverage views: Attractive (A). The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. Neutral (N). The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. Cautious (C). The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Current Investment List (CIL). We expect stocks on this list to provide an absolute total return of approximately 15%-20% over the next 12 months. We only assign this designation to stocks rated Outperform. We require a 12-month price target for stocks with this designation. Each stock on the CIL will automatically come off the list after 90 days unless renewed by the covering analyst and the relevant Regional Investment Review Committee.

#### Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs, and pursuant to certain contractual arrangements, on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy.

This research is disseminated in Australia by Goldman Sachs JBWere Pty Ltd (ABN 21 006 797 897) on behalf of Goldman Sachs; in Canada by Goldman Sachs Canada Inc. regarding Canadian equities and by Goldman Sachs & Co. (all other research); in Germany by Goldman Sachs & Co. oHG; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs JBWere (NZ) Limited on behalf of Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman, Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

**European Union:** Goldman Sachs International, authorised and regulated by the Financial Services Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman, Sachs & Co. oHG, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also be distributing research in Germany.

#### General disclosures in addition to specific disclosures required by certain jurisdictions

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, our

proprietary trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, excluding equity analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives (including options and warrants) thereof of covered companies referred to in this research.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of the investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors.

Current options disclosure documents are available from Goldman Sachs sales representatives or at

http://www.theocc.com/publications/risks/riskchap1.jsp. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Our research is disseminated primarily electronically, and, in some cases, in printed form. Electronic research is simultaneously available to all clients.

Disclosure information is also available at http://www.gs.com/research/hedge.html or from Research Compliance, One New York Plaza, New York, NY 10004.

Copyright 2008 The Goldman Sachs Group, Inc.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.