# INITIAL CLASSIFICATION MEMORANDUM

### LEHMAN BROTHER HOLDING INC

June 13, 2008

RISK RATINGS:	S&P	MOODY'S	<b>CITI ORR</b>
	A / Negative	A1 / Negative	ORR 3

## BACKGROUND

Lehman was classified 1a on March 18, 2008 following the collapse of Bear Stearns and the continued rumors regarding the Firm's liquidity, which had an adverse effect on market perception as the Firm is considered a direct peer to Bear, which lead to large single day drop of 46% in its share price.

In the following weeks, Lehman effectively managed through the crisis and has continued to maintain a strong liquidity profile. The day after JPM announced its acquisition of Bear, Lehman's CFO, Erin Callan addressed the markets on national television on the soundness of the Firm and its strong liquidity. Consequently, the rumors subsided, the stock price rebounded, the firm recorded good 1Q07 earnings and raised \$3bn in convertible debt (which was strongly received by investors). Following the release of their 1Q08 results, Lehman's rating was re-affirmed by S&P (A+ / Negative) and Moodys (A1 / Stable). The rating agencies noted Lehman abundant liquidity and strong Risk Management.

Based on the above, we considered declassifying the relationship in early May. Given that the classification was a reaction to a sudden market event and thought to be temporary, we did not complete an initial classification memo at that time.

# **CURRENT SITUATION**

In recent weeks, short-sellers began targeting Lehman again causing a new wave of market concern and speculation that Lehman may be the next firm to fall. Short seller, David Einhorn, who runs Hedge Fund, Greenlight Capital LLC, has been critical of Lehman's accounting and the size of its problem assets. This has lead to speculation that Lehman will have further write-downs in 2Q08 and require additional capital. This became reality when the company pre-announced a 2Q08 loss of approximately \$2.8bn mainly due to ineffective hedges during the quarter.

There are differing views on the street and Citi's Corporate Bond Research analyst (Ryan O'Connell) recently commented that it feels "another Bear-Stearns type funding squeeze is overblown" for Lehman. BernsteinResearch Senior Analyst and former CEO of Lehman, Brad Hintz, also had relatively positive comments regarding Lehman's accounting and management but mentioned that leverage remains high and future earnings will be under pressure due to the economic slowdown.

Nonetheless, as Lehman has felt the heat, the company has made significant efforts to have more open and effective communication with investors, creditors and the markets by articulating its financial strength, stressing it strong liquidity profile, and risk management strategy. The management team's credibility however has come under fire with 3 additional capital raises since January after the company indicated it did not need any more after the first one. Also Lehman increased assets and leverage in the 1<sup>st</sup> quarter while other firms have been focused on delivering.

In fact on Thursday, June 12, 2008, Lehman replaced Chief Financial Officer Erin Callan and President Joseph Gregory after the firm failed to quell speculation about mounting losses and the steep drop in its stock price. Since she was promoted to CFO in December 2007, Ms. Callen will return to the Investment Banking Division and be succeeded by co-chief administrative officer Ian Lowitt. Herbert ``Bart" McDade, the 48-year-old head of the equities business worldwide, will replace Gregory.

Ms Callan had been Lehman's public spokesperson defending the Firm's business model and its strategy in managing exposure including the valuations of its high risk assets. In addition, Ms. Callen stated in mid March that the Firm did not need to raise additional capital after raising \$1.9bn in February 2008. However, since that time Lehman raised an additional \$10bn in fresh capital, which caused the markets to again question Lehman's management. With a new team in place the markets are looking for a more definite strategic plan and a re-evaluation of prior disclosures

On June 2, 2008, S&P lowered its Senior Unsecured rating and Lehman Brothers Holdings and its subs. The downgrade was in conjunction with a review of the global securities industry (Merrill Lynch and Morgan Stanley were downgraded as well). The downgrade was primarily reflective of uncertainties regarding future earnings. S&P is concerned that the pace and extent of earnings improvement could be considerably less than previously assumed given a generally slower business environment and the negative effects of its hedges. S&P mentioned that Lehman bolstered its liquidity and funding profile to ensure sound liquidity and considers its funding profile as very stable, with an excess liquidity position and contingent funding plan considered sound.

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In terms of marked indicators, Lehman's CDS spreads are trading around 280bps (more like a below investment grade credit) and peaked at 447bps immediately following the Bear collapse (it's CDS spread was 80bps 09/2007). Lehman's stock price has fallen 64% since the beginning of 2008 and was trading at \$25.4 on March 17, 2008, the Monday following the Bear Stearns rescue. The price initially rebounded to \$48.4 on 5/2/08, but has fallen again to \$23.5 following the latest round of negative market news.

Ahead of Lehman's second quarter 2008 earning announcement, several key risks are evident:

- Lower Future Earnings
- High Leverage
- Exposure to MBS/ABS, CDO and Leverage Loans
- Need to Raise Capital
- High Commercial Real Estate exposure

In anticipation of sub-par results, several analysts have revised down their 2Q2008 estimates for Lehman and have asserted that:

- Lehman used special one-time charges and gains to artificially inflate its first-quarter results.
- The company did not disclose its holdings of collateralized debt obligations before the first quarter.
- The company has not valued its commercial mortgage related assets based on market prices, and
- That it will need to raise further capital.

### 2Q EARNINGS PRE-ANNOUNCEMENT

On the morning of June 9, 2008, Lehman pre-announced their 2Q08 earnings one week early in a move to demonstrate the Firm's proactive communication.

**Earning and Capital -** Lehman announced that it will post a \$2.8bn second quarter loss and said that it will raise \$6bn in capital through a stock sale. The additional capital was raised through a \$4.0bn public offering of common stock and a \$2.0bn public offering of two million shares of Convertible Preferred Stock. There have been reports that the New Jersey Division of Investment, which manages the state's \$80 billion of pension funds, will be among the investors. Excluding the new capital raise, Lehman's total stockholders' equity is estimated to be \$26bn, and total long-term capital is approximately \$156bn (\$153bn @ 1Q08).

Lehman expects to report negative net revenues of \$0.7bn compared with revenues of \$3.5bn in 1Q08. The net revenue reflects negative mark-to-mark adjustments, principal trading losses, and losses due to ineffective hedges. Lehman's hedging strategy performed poorly in March (following the Bear Stearns collapse) and April (when spreads widened). During 2Q08, the hedges only offset 17% of their losses compared with over 100% in previous periods. Lehman did mention that they are not going to abandon their hedging strategy and the hedges performed well in May and early June.

**MTM Adjustments -** Lehman's 2Q08 losses on mark to market adjustments was \$3.6bn (gross) and \$3.7bn (net) reflecting the ineffectiveness of its hedging strategy compared with -\$4.7bn (gross) and -\$1.8bn (net) in 1Q08. These adjustments primarily relate to two commercial real estate transactions that were significantly marked down. In 2007, Lehman teamed with a private investment company to purchase a real estate investment trust (Archstone Smith) valued at \$22bn and also teamed with a California developer (SunCal Co) to develop and sell thousands of properties to builders across Southern California. Lehman overpaid for the properties and has taken big markdowns. Approximately, \$1.6bn worth of assets from these deals remain on its books. Lehman sold \$7bn in commercial real estate assets in the quarter but is left with a commercial real estate portfolio of \$29bn, which is very high compared with other investment banks.

Analysts have questioned the possibility of additional write-downs and why these assets were not written down in prior quarters. Lehman countered by stating that they were very aggressive in writing down its CRE portfolio and they were very active in selling these assets (which included all asset classes) and their hedges performed well in the past; thus, they are confident in the level of write-downs.

**Leverage** - Lehman sold about \$130bn of assets during the quarter (mortgage-related assets and leveraged loans were cut by about 20%), as a result, gross leverage reduced to under 25.0x from 31.7x (in 1Q08) and net leverage declined to under 12.5x from 15.4x. These figures do not take into account the \$6bn in new capital. Including the new capital raise net leverage is < 10X and gross leverage is < 22X. Lehman mentioned that they are comfortable with this level and will maintain it going forward.

**Liquidity** – Lehman ended the first quarter with an estimated liquidity of pool of \$45bn at the holding company, which is well above the level at 1Q08 (\$34bn), and its highest level on record. Lehman completed their budgeted full year fiscal 2008 unsecured funding plan and has total short-term debt of \$31bn outstanding as of 2Q08. The markets appear satisfied with the Firm's

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liquidity level and it appears a Bear Stearns like liquidity "run" is less of a concern. Lehman mentioned that client revenues are up and no clients have left the Firm. Lehman has minimal reliance on the commercial paper market and ST ABCP programs.

Further bolstering liquidity, the Federal Reserve has given primary dealers access to its discount window through the Primary Dealer Credit Facility. The Fed has also made available a Term Securities Lending Facility, which allows firms to swap certain types of agency collateral for treasury securities. In addition, Lehman has excess to funds through the European Central Bank (through Lehman Bankhaus AG) as lenders of last resort.

**Moody Outlook** - Moody's changed its rating outlook on Lehman to "negative" from "stable" after pre-announcement amid concerns about risk management. The ratings agency stated any additional firm-wide losses in coming quarters "would raise serious concerns about the effectiveness of Lehman's risk management and may create additional market unease about the firm, potentially weakening its franchise."

Lehman will schedule its regular quarterly earning call on June 16, 2008 to provide further details including its capital ratios, level 1, 2 & 3 assets, and a further breakdown of its exposure to leverage loans, Alt A, Sub Prime and ABS/CDOs.

## CITI'S BOND RESEARCH REPORT - "NO SMOKING GUN"

In Citi's Corporate Bond Research Report dated 5/28/08, the analyst was relatively less concerned than other analysts and took a more positive view commenting that:

- Lehman follows a prudent funding practice and unlike Bear Stearns, the firm does not rely on customer balances in it prime brokerage operation to finance its balance sheet.
- Lehman has reduced its net leverage to 16X which is below that of its peer (18X 22X).
- He "does not believe that Lehman's major franchises have been impaired."
- Lehman's exposure to sub prime mortgages is \$4bn, which it considers manageable and the Firm is on track to reduce its commercial mortgage/CMBS exposure by \$5bn in the second quarter.
- Lehman has been open in its communication with investors.

## **RISK MITIGATION STRATEGY**

We transact regularly with Lehman globally. We are at capacity on many of our trading limits and we looking to minimize exposure to subprime and Alt A and other more risky MBS. We have daily margining agreements in place with all trading counterparties. We have advised the desks that we will not approve the novation of trades and we will look to be more selective in approving larger long term tenor trades. In term of GTS, we are Lehman's global securities clearing bank with over \$20bn of lines approved and are currently looking to reduce limits in certain markets to a level expected to be \$12bn - \$13bn and Lehman has agreed to maintain a "good faith" deposit with Citi in the amount of \$2.0bn.

## **CLASSIFICATION TRIGGERS**

#### **Declassification to Current**

Both of the below must occur for declassification:

- Both Moody's and S&P remove Lehman from Outlook Negative
- Lehman returns to profitability in 3Q08 and 4Q08

#### **Reclassification to II**

Any of the below must occur for reclassification:

- Downgrade by Moody's or S&P to the level of Baa3/BBB- or below.
- Further market disruption causing Lehman's CDS spread to remain elevated above 400bps for 3 consecutive business days (Lehman CDS spread peaked at 447bps following the Bear Stearns collapse when we classified the Firm 1a.
- Further market disruption causing Lehman's market capitalization to falls below \$10bn for 3 consecutive business days. Currently, Lehman's market cap is \$15.2bn and it was \$28.4bn in August 2007.

# 1Q08 - MTM ADJUSTMENTS AND MORTGAGE RELATED / HIGH YIELD DEBT EXPOSURE

- Level III assets as of 2/29/08 was \$42.5bn (\$41.9bn at YE07) accounting for 171% and 5% of total equity and assets respectively. These ratios are better than Morgan Stanley (235% & 7%) and Goldman (226% and 8%). 1Q08 information for Merrill is not available.
- During 1Q08 Lehman recorded a negative mark to market adjustment of \$1.8bn net (\$4.7bn gross) of gains on risk mitigation strategies and gains on debt liabilities. The net write down was broken down as follows: Residential Mortgages \$0.8bn, commercial Mortgages \$0.7bn and \$0.5bn related to leverage loans.
- Lehman's participation in "troubled" asset classes are limited:
  - 1. For ABCP, Lehman acts as an agent only.
  - 2. Lehman does not own or sponsor any SIV's.
  - 3. Net exposure to monolines (after hedges and credit reserves) is not significant.

### **In Billions**

For the quarter ended Feb 29, 2008	MTM - Gain/(I	nes) *	Gross balar	ices as of *
	Gloss	Net	29-Feb-08	30-Nov-07
Residential mortgages:				
Securities			\$18.20	\$16.70
VVhole loans			11.9	14.2
Servicing and other			1.7	1.2
	(\$3.00)	(\$0.80)	\$31.80	\$32.10
Other asset-backed (non-residential)	(\$0.20)	(\$0.10)	\$6.50	\$6.20
Commercial mortgages:	· · · · · · · · · · · · · · · · · · ·			
Whole loans			\$24.90	\$26.20
Securities and other			11.2	12.7
	(\$1.10)	(\$0.70)	\$36.10	\$38.90
Real estate-related investments (f)	(\$0.30)	(\$0.30)	\$12.90	\$12.80
Acquisition Finance Facilities: (g)				
High Grade				
Contingent Commitments			\$7.20	\$10.20
Unfunded Commitments			- 0.8	
Funded Loans			2.9	1.7
			10.9	11.9
High Yield				
Contingent Commitments			\$3.70	\$9.70
Unfunded Commitments			2.2	2.7
Funded Loans			11.9	11.5
			\$17.80	\$23.90
	(\$0.70)	(\$0.50)	\$28.70	\$35.80
Debt liabilities measured at fair value ~	<u>\$0.60</u>	<u>\$0.60</u>	\$37.20	\$36.20
Total	(\$4.70)	(\$1.80)		
* Less certain economic risk mititgation s				
~ These gains represent the effect of cha				
income or expenses as well as any gair	n or loss from the	embedded	derivative compo	onent of these instrument

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The Company's aggregate residential mortgage inventory at February 29, 2008 and November 30, 2007 can be classified into the following product categories:

In billions	Feb. 29, 2008	Nov. 30, 2007
Prime and Alt-A <sup>1</sup>	\$14.6	\$12.7
Europe	9.5	10.2
Subprime/Second Lien <sup>2</sup>	4.0	5.3
ABS-CDO	0.9	1.1
Asia-Pacific	0.7	0.5
Other U.S.	2.1	2.3
	\$31.8	\$32.1

The Company's commercial mortgage inventory at February 29, 2008 and November 30, 2007 was:

In billions	Feb. 29, 2008	Nov. 39, 2007
Americas	\$17.4	\$20.6
Europe	10.0	10.4
Asia-Pacific	8.7	7.9
	\$36.1	\$38.9