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Lehman Brothers: A License to Fail with Other People's Money

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EXECUTIVE SUMMARY

The bankruptcy of Lehman Brothers Holdings, Inc. ("Lehman") is the largest bankruptcy ever filed, with losses to investors, both small and large, totaling billions of dollars. In January 2008, Lehman Brothers, heavily invested in by pension plans such as the California Public Employees' Retirement System and the New York State Teachers Retirement Plan, traded at a high of over $65 per share. At that time, Lehman reported record numbers of nearly $60 billion in revenue and more than $4 billion in earnings. However, a mere eight months later, Lehman's stock was trading under $4 per share, and on September 12, 2008, Lehman filed for Chapter 11 bankruptcy.

The Bankruptcy Court appointed an Examiner to investigate and report on Lehman's business affairs, with particular regard to "any fact ascertained pertaining to fraud, dishonesty, incompetence, misconduct, mismanagement, or irregularity in the management of the affairs of the debtor, or to a cause of action available to the estate." The Examiner's findings, taken at face value, reveal that the legal system that allowed Lehman's failure will permit similar failures in the future because, for the most part, Lehman's actions did not violate the law.

This report explores Lehman's risk management in a declining market and the valuation of its assets. Lehman, after recognizing the magnitude of the economic crisis, doubled-down on its risk, dramatically increasing the amount it was prepared to lose, while also disguising the declining value of its assets. These acts were not inadvertent, but rather were deliberate violations of internal risk limits and conscious overvaluations of its assets.

RISK MANAGEMENT: CONSCIOUS VIOLATION OF INTERNAL RISK LIMITS

- Lehman doubled-down on risk in order to make a profit. In doing so, Lehman increased the amount it was prepared to lose as result of its investments from $2.3 billion to $4.0 billion. This constituted a 74% increase in its risk limits, enacted during a declining market.
- Lehman frequently exceeded its self-imposed risk limits. At the same time, Lehman compounded its risk through inaccurate valuations of the assets upon which the inflated risks rested. The result was that Lehman's leverage was much higher than was reported to the public and the artificially increased asset values caused Lehman to take more risk than was understood.

VALUATION: CONSCIOUS FAILURE TO ACCURATELY VALUE ASSETS.

- As the economic downturn became more pronounced, Lehman inflated the value of its assets, thereby further concealing the extent to which Lehman had increased its risk and leverage.
- In the year preceding its bankruptcy, Lehman grossly overstated its expected return on investments.

CUMULATIVE EFFECT OF RISK MANAGEMENT AND VALUATION POLICIES

- Lehman's 74% increase in risk was magnified by its systemic failure in the twelve months preceding bankruptcy to properly value its assets, thereby disguising the true level of risk Lehman was actually assuming.
- The net effect was that Lehman was a hollow shell before it went bankrupt.
- The precedential value established by the Examiner's Report is that Lehman had a *license to fail*. Lehman acted within the constraints of the law but went bankrupt because of a series of ambitious, yet risky business decisions. The law permitted Lehman to do this by allowing the adoption of dangerous business practices that could not be sustained in a volatile economy. It was not unlawful for Lehman to secretly increase its degree of risk, deliberately

violate its increased risk limits, and surreptitiously backdate its documents to disguise violations of its risk limitations. Furthermore, it was not unlawful for Lehman to unreasonably overvalue its assets, thereby further disguising its leverage and, ultimately, the magnitude of the risk it was taking with its depositors' money.

METHODOLGY

The *Report of Anton R. Valukas, Examiner, In re Lehman Bros. Holding Inc., No. 08-13555* ("Examiner's Report"), was prepared for the United States Bankruptcy Court for the Southern District of New York. Nearly all of the facts cited in this report are from the Examiner's Report. Pursuant to the standard practice of the Center for Policy and Research, this report assumes the accuracy of all findings and characterizations in the Examiner's Report. The Examiner's Report was accepted by the Bankruptcy Court and is the legal basis upon which the bankruptcy proceedings rest. The Examiner's Report is especially significant because of the enthusiasm with which the Court adopted it. The Court did not merely accept the Examiner's Report, but Judge James M. Peck volunteered this description: "I consider this to be one of the most extraordinary pieces of work product I have ever encountered . . . It's extraordinarily comprehensive. It reads like a best seller."[1]

The Examiner's Report is likely to be the only basis for the Court's determination of which, if any, of Lehman's creditors "with millions of dollars in claims at stake" will be able to recover.[2] In spite of this, there has been minimal consideration of the detailed findings which can be found interspersed throughout the Examiner's Report. The findings of the Examiner are placed within his report in a manner that makes Lehman's policies and actions difficult to

[1] Ben Hallman, *History Lessons*, THE AMERICAN LAWYER, Sept. 2010, at 3.
[2] Justin Baer and Henny Sender, *Valukas report finds few heroes*, FINANCIAL TIMES (Mar. 12, 2010, 12:41 AM), http://www.ft.com/cms/s/0/09d2f184-2d6d-11df-a262-00144feabdc0.html#axzz1bRr9hWLu.

discern. A careful review of the Examiner's Report reveals that there were findings other than the well-cited Repo 105 transactions that reveal egregious decisions that had great consequences for Lehman, its investors, and the global economy.

Notably, the Examiner did not investigate all of Lehman's transactions or business decisions due to a lack of time and resources. Thus, some of his conclusions are based on the analysis of small samples of Lehman's total transactions and business decisions.

The Center's report is based on an analysis of over 600 pages of the Examiner's Report, in which Research Fellows addressed: (1) Lehman's risk management and (2) Lehman's valuation methods. Having "started with a sea of approximately 350 billion pages' worth of available e-mails, documents and reports from Lehman's internal database,"[3] the Examiner presented his factual investigation to the Court in over 2200 pages in order to identify colorable claims.

[3] Ben Hallman, *History Lessons*, THE AMERICAN LAWYER, Sept. 2010, at 5.

LICENSE TO FAIL

I. RISK MANAGEMENT: CONSCIOUS VIOLATION OF INTERNAL RISK LIMITS

In the first section of his report, the Examiner addressed Lehman's handling of its overall risk and found there were no colorable claims for a breach of the duty of care.[4] Specifically,

> [t]he risk tolerance of the Firm is primarily expressed through a framework called Risk Appetite which is grounded in [Lehman's] financial targets. The Risk Appetite represents the amount of money that the Firm is "prepared to lose" over one year due to market, event and counterparty credit risk.[5]

The Examiner determined there were no colorable claims despite finding that Lehman consciously exceeded its firm-wide limits, treating "the firm's risk appetite limit as a soft limit, rather than a necessary and firm constraint on management's assumption of risk."[6]

"Lehman recognized that it 'had been exceeding the firm-wide risk appetite on a persistent basis. . .'"

It was not unlawful for Lehman to secretly increase its degree of risk, deliberately violate its increased risk limits, and surreptitiously backdate its documents to disguise the violations of its risk limitations. On three occasions between December 2006, and December 2007, Lehman increased its risk limits, gambling on the chance to turn the economic downturn into large profits because Lehman's management "saw the unfolding crisis as an opportunity to pursue a countercyclical growth strategy."[7] In December 2006, Lehman increased its risk from $2.3 billion to $3.3 billion.[8] On September 7, 2007, Lehman increased its risk from $3.3 billion to $3.5 billion because it recognized that it "had been exceeding the firm-wide risk appetite on a

[4] Report of Anton R. Valukas, Examiner, In re Lehman Bros. Holding Inc., No. 08-13555, Vol. 1, at179-80 (Bankr. S.D.N.Y. Mar. 11, 2010), ECF No. 7531 [hereinafter Examiner's Report, Vol. 1].
[5] Lehman Brothers – Global Risk Management Division, *Quantitative Risk Management*, POLICY MANUAL (Sept. 2007), at 5, http://lehmanreport.jenner.com/docs/DEBTORS/LBEX-DOCID%20384020.pdf.
[6] Examiner's Report, Vol. 1, at 179.
[7] *Id*. at 56.
[8] *Id*. at 72.

persistent basis for some time."[9] However, within a month, Lehman had again exceeded its $3.5 billion risk limit by 22%, or $769 million.[10] Therefore, Lehman had taken on approximately $4.27 billion in risk at its peak but did not take any action to correct this overage until January 14, 2008, when it increased its risk limit to $4.0 billion and backdated it to December 3, 2007.[11] Notably, this increase was still insufficient to correct the overage.

". . .insufficient evidence . . ."

There was insufficient evidence to conclude that there was a colorable breach of a fiduciary duty. "[T]o establish a colorable claim that Lehman officers breached their fiduciary duty . . . the evidence must show that Lehman's senior management was reckless or irrational in managing the risks associated with the principal investment strategy that Lehman pursued during 2006 and 2007."[12] The Examiner determined that "in pursuing its aggressive growth strategy, Lehman's management chose to disregard or overrule the firm's risk controls on a regular basis."[13] This is because the risk limits by which Lehman was guided were self-imposed and exclusively intended to allow Lehman's management to make educated decisions about the future of the company. In sum, the existence of internal risk limits does not impose any legally-binding duties, and Lehman's management was entitled to use its own discretion and essentially ignore predetermined risk controls.[14]

[9] *Id.* at 133.
[10] *Id.* at 141.
[11] *Id.* at 153.
[12] Examiner's Report, Vol. 1, at 48.
[13] *Id.* at 49.
[14] *Id.* at 180.

" . . . Lehman purposefully excluded commercial real estate from risk-appetite limits . . ."

The Examiner also investigated whether Lehman's officers' decision to acquire Archstone, a Real Estate Investment Trust ("REIT"), constituted a claim for a breach of the duty of care.[15] At the heart of this issue is whether Lehman's omission of Archstone in its risk appetite calculations gave rise to a colorable claim. Despite the risk of contagion to the commercial real estate market after the onset of the subprime mortgage crisis in December 2006, Lehman's officers' concluded that the risk of taking on Archstone was manageable.[16] As a result, Lehman entered into a $22 billion joint venture with Tishman Speyer, even though Lehman's Real Estate group was already near its risk limits and the risk accompanying Archstone was "as large as or larger than Lehman's entire pre-existing real estate book put together."[17] Lehman purposefully excluded commercial real estate from its calculation of risk-appetite limits, which distorted its understanding of the risk it was assuming.[18]

Lehman's exclusion of Archstone and other commercial real estate transactions from regular stress testing, which is intended to measure the volatility of an investment, in the first half of 2007 was significant. For example, one experimental stress test predicted $7.4 billion in losses on the real estate and private equity positions that had previously been excluded.[19] Another test predicted losses of $10.9 billion attributable to the excluded assets.[20] "[T]hese stress tests were conducted long after the assets were acquired . . . and they were never shared with Lehman's senior management."[21] Nevertheless, the Examiner concluded that Lehman's management "seriously considered" the risks in the Archstone transaction and decided the

[15] *Id.* at 174-75.
[16] *Id.* at 172.
[17] *Id.* at 172-73.
[18] Examiner's Report, Vol. 1, at 112-13, 173.
[19] *Id.* at 69.
[20] *Id.* at 69-70.
[21] *Id.* at 70.

rewards outweighed the risks.[22]

[22] *Id.* 174-75.

II. VALUATION: CONSCIOUS FAILURE TO ACCURATELY VALUE ASSETS

In addition to risk management, the Examiner addressed whether Lehman's valuation of its assets gave rise to any colorable claims. Although addressed as two independent sections by the Examiner, risk management and valuation are intrinsically connected. Lehman used pricing models "to value, aggregate and hedge risk positions."[23] These "pricing models produce valuations and risk-factor sensitivities . . . which feed into the risk models used by the [Global Risk Management Division]."[24] Therefore, Lehman's valuation of its assets had a direct effect on its calculation of risk limits. Thus, by inaccurately valuing its assets, Lehman had an inaccurate measure of how much risk it had assumed.

a. Lehman's Principal Transaction Group

". . . Lehman valued these investments through . . . gut feeling . . ."

Lehman's Principal Transaction Group ("PTG") assets were comprised of investments in real estate projects in which the real estate was being developed or improved.[25] "PTG investments were premised on execution of a business plan, typically of two to five year duration, which often included sale of the underlying property after development."[26] These positions were illiquid compared to those in the Commercial Book, even in an upward trending market, because Lehman did not market its PTG assets for sale.[27] Additionally, Lehman used a highly subjective method of valuing PTG positions.[28]

> Anthony J. Barsanti, the PTG Senior Vice President responsible for marking the PTG positions, told the Examiner that Lehman valued these investments through a combination of financial projections and "gut feeling," due to the unique nature of

[23] Lehman Brothers – Quantitative Risk Management, *supra*, at 4.
[24] *Id.*
[25] Report of Anton R. Valukas, Examiner, In re Lehman Bros. Holding Inc., No. 08-13555, Vol. 2, at 285 (Bankr. S.D.N.Y. Mar. 11, 2010), ECF No. 7531 [hereinafter Examiner's Report, Vol. 2].
[26] *Id.* at 286.
[27] *Id.*
[28] *Id.*

> each asset and the lack of sales data regarding comparable debt and equity positions."[29]

These "gut feelings" included judgment calls based on "experience, the collateral's performance with respect to the development's business plan, and other market data related to the collateral's geographic region or property type that was not always accounted for in their models."[30]

"[T]he PTG portfolio's value was supposed to represent Lehman's judgment as to the price at which each position could be sold to a third party as of a particular measurement date," as required by SFAS 157.[31] However,

> Barsanti, who Kenneth Cohen[32] identified as the person principally responsible for determining PTG marks, stated that he did not know whether PTG assets could be sold for the price at which they were marked and stated he had not thought about it.[33]

There was a systematic flaw in Lehman's valuation of its PTG portfolio because the valuation of "these assets [was] based on whether the development was proceeding according to the project's business plan and not the price a buyer would pay for the asset."[34] Consequently, "the PTG portfolio, which was valued at approximately $9.6 billion at the end of fiscal year 2007," was written down by $1.1 billion over the first three quarters of 2008.[35] There was sufficient evidence to indicate that Lehman did not value PTG assets in light of the rates of return that would be required to convince investors to purchase them.[36]

Barsanti and Jonathan Cohen decided it was appropriate to write down the PTG portfolio "by approximately $714 million for the third quarter of 2008."[37] However, approximately $214

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[29] *Id*.
[30] *Id.* at 286-87.
[31] Examiner's Report, Vol. 2, at 287.
[32] A Managing Director in Lehman's Global Real Estate Group ("GREG") and Head of U.S. Originations.
[33] Examiner's Report, Vol. 2, at 288.
[34] *Id.* at 288.
[35] *Id.* at 288-89.
[36] *Id.* at 289.
[37] *Id.* at 290.

million of write-downs were not taken because Cohen was under the impression that Lehman had imposed a $500 million cap on such write-downs for that particular quarter.[38] As a result, Cohen never informed anyone senior to him, other than Gerard Reilly, the Global Product Controller, that his calculations exceeded this $500 million limit.[39] In a footnote, the Examiner

> conclude[d] that there [was] insufficient evidence to support a finding that Lehman's senior managers intended to impose such a limit, but Jonathan Cohen was unambiguous in asserting that it was his understanding that such a limit was in place.[40]

Despite Cohen's assertions, the Examiner concluded that there was insufficient evidence to support a colorable claim for a breach of fiduciary duty regarding Lehman's valuation errors. This is because there was insufficient evidence that any Lehman officer acted with the necessary scienter to impose liability.[41]

"Stop feeding me bullshit. I don't believe you."

TriMont Real Estate Advisors ("TriMont") was a third-party servicer tasked with providing asset-specific information to Lehman's PTG business desk and Product Control Group ("PCG") to assist PTG valuations.[42] Several Lehman employees claimed that TriMont's data often included errors, which were so pervasive that Aristide Koutouvides, Vice President in PTG, "considered the stabilized value reported by TriMont to be useless."[43] According to Koutouvides, TriMont's asset managers were relying too heavily on developers' assurances that a particular project would be successful, rather than reporting on the actual deteriorating market conditions.[44] On at least one occasion, Koutouvides told TriMont's asset managers, "Stop

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[38] *Id.* at 290-91.
[39] Examiner's Report, Vol. 2, at 291.
[40] *Id.* at 291 n.1053.
[41] *Id*. at 292.
[42] *Id.* at 306; *see* Appendix A for a more detailed discussion of TriMont.
[43] *Id.* at 311 n.1128.
[44] Examiner's Report, Vol. 2, at 312.

feeding me bullshit. I don't believe you."[45] Although PTG Senior Vice President Barsanti disagreed with Koutouvides' belief that TriMont provided high valuations, he nevertheless confirmed that PTG had to instruct TriMont on many occasions to correct the data.[46]

Ultimately, there was "sufficient evidence to support a determination that Lehman did not appropriately consider market-based yield when valuing PTG assets in the second and third quarters of 2008."[47] This was because "Lehman's systemic failure to incorporate a market-based yield generally resulted in an overvaluation of PTG assets."[48] However, the Examiner did

> not find sufficient evidence that Lehman's failure to employ appropriate yields for PTG assets during the second and third quarter of 2008 supports a finding that any Lehman officers breached their fiduciary duties. Although there [was] sufficient evidence to demonstrate that the valuation methodology for PTG assets did not rely on market-based assumptions, there [was] insufficient evidence to demonstrate that any Lehman officer acted with an intent to produce incorrect values or conducted the valuation process in a reckless manner. While Lehman's staffing was inadequate to comprehensively value or test the significant number of positions in the PTG portfolio, and there was also questionable judgment in the selection of yields, the valuation determined by Lehman did not result from actions (or omissions) that would support a claim of a breach of fiduciary duty."[49]

b. Residential Whole Loans and Residential Mortgage-Backed Securities

" … there was little consistency across the desk as to methodology."

While there were several issues with Lehman's price testing of its Residential Whole Loan ("RWL") portfolio, the Examiner found insufficient evidence "to support a colorable claim that Lehman's valuation of these assets was unreasonable."[50] It should be noted that the Examiner investigated only the United States RWLs, reasoning that it "would not be a prudent

[45] *Id.* at 312.
[46] *Id.*
[47] *Id.* at 329.
[48] *Id.*
[49] *Id.* at 330.
[50] Examiner's Report, Vol. 2, at 494.

use of the estates' resources" to investigate non-U.S. RWLs.[51] The U.S. RWLs for May and August 2008 were valued at $6.9 billion, while all non-U.S. RWLs were valued at a total of $7.7 billion. Therefore, the Examiner's determination of Lehman's reasonableness excludes 53% of the total RWLs owned and traded by Lehman.[52]

"Each Lehman trading desk had its own method for pricing assets and there was little consistency across the desks as to methodology."[53] The PCG conducted monthly independent price verifications in order to check the traders' marks and provide some semblance of standardization.[54] When the variances between the PCG's price verification and the desk price for the assets were too great, the PCG would confer with the desk and, if necessary, inform senior management.[55]

The PCG incorporated the "mock securitization" method prior to 2008 in order to value the RWLs.[56] This process used recently closed deals of securitized Residential Mortgage-Backed Securities[57] ("RMBS") with similar collateral as a point of reference.[58] "The sum total of the values of all RMBS issued in such a deal is considered to be representative of the price of the RWL pool on which it is based."[59] RWLs have a lower value than RMBS and estimations are made in order to compensate for this difference.[60] When securitization activity declined, it became much harder to accurately price RWLs.[61] "In May of 2008, Lehman 'acknowledged

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[51] *Id.* at 497.
[52] *Id.*
[53] Examiner's Report, Vol. 2, at 501.
[54] *Id.* at 501.
[55] *Id.* at *502*.
[56] *Id.* at 502.
[57] *See* Appendix B for description of RMBS and RWLs.
[58] Examiner's Report, Vol. 2, at 503.
[59] *Id.* at 503.
[60] *Id.* at 503.
[61] *Id.* at 500.

internally that price transparency does not exist for whole loans.'"[62]

In May 2008, Lehman valued its RWLs using "price testing," which used recent transactions of similar assets to create a benchmark for valuation.[63] Lehman could find only seven trades upon which to base the valuation of $2.7 billion worth of U.S. RWLs.[64] Of those seven, three of the trades were cancelled after Lehman had completed its RWL valuations.[65] The PCG did not follow up on these seven trades to ensure that the trades went through, nor did any of the group members discuss the cancellation of trades as a potential problem.[66] It should have been apparent to the traders that the benchmark trades on which Lehman's valuation of its second quarter price tests were based had been cancelled.[67] For one of these trades,

> [h]ad Lehman's product controllers checked to confirm that this was a proper trade, they would not have found any entry in Lehman's MTS trade system, which would have been a red flag that this trade was irregular in some way.[68]

Nonetheless, this action was deemed to be reasonable because

> [t]he sales data that Lehman used to price test its U.S. RWL assets in May and August 2008 was thin; however, Lehman's Product Control Group had few options available for price verification at this time. Even though several of the trades used for price verification in May 2008 were later cancelled, Lehman's product controllers had no way to know this at the time they undertook the price verification process.[69]

Lehman's reliance on third quarter trades in August was more troubling than its reliance on trades in the second quarter.[70] In August of 2008, the PCG used the average of four Prime Whole Loan sales as benchmarks in order to test five out of the ten categories of its U.S.

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[62] *Id.* at 500 (internal quotations omitted).
[63] *Id.* at 504.
[64] Examiner's Report, Vol. 2, at 504.
[65] *Id*. at 505.
[66] *Id.* at 507.
[67] *Id.* at 516.
[68] *Id.* at 508.
[69] *Id.* at 526.
[70] Examiner's Report, Vol. 2, at 516.

RWLs.[71] Of these four trades used as benchmarks, three were ultimately cancelled and one was never entered into Lehman's trading system.[72] However, the valuations determined for the third quarter of 2008 were within the range of reasonableness, and when compared to the Examiner's model prices were determined not to be unreasonable.[73]

Like RWLs, the trading desk was the first to value RMBS, subject to the PCG's review.[74] RMBS were valued in one of two ways: (1) by looking to the market value of recent trade prices or (2) through application of model price tests.[75] The process was as follows:

> The key feature of RMBS for valuation purposes [was] the tranche structure and the associated cash flow waterfall. Once this information, which [was] available from vendors, [was] obtained, the only remaining step [was] for the price tester to apply assumptions regarding the underlying RWL collateral. These assumptions include[d]: (i) the expected default rate, (ii) loss severity expectations, and (iii) expected rates of prepayment. These inputs, along with information about tranche structure of the RMBS, provide[d] estimates of the cash flow produced by the RMBS. After these cash flows [were] calculated, the party performing valuation need[ed] only take into account the yield demanded by investors in the market to determine the price at which the RMBS could be sold.[76]

"The primary model used by Lehman to value RMBS in 2008 was the Intex waterfall engine, the same model used for the mock securitization model. . . ."[77] "Price testing for RMBS can also be performed through comparisons to recent trade data and third-party prices."[78] When conducting an independent valuation for individual RMBS bonds, "the Examiner's estimated values in May 2008 ranged from 58% less than Lehman's value at the low extreme to 129% more at the high extreme."[79] For August 2008, the low was 80% less and the high was 70% more than

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[71] *Id*. at 516.
[72] *Id*.
[73] *Id.* at 519.
[74] *Id.* at 529.
[75] *Id*. at 530.
[76] Examiner's Report, Vol. 2, at 530.
[77] *Id.* at 531.
[78] *Id.* at 531.
[79] *Id.* at 537.

the average.[80] The Examiner determined that, because his test rates fell below and above Lehman's valuations, the rates were not uniformly either aggressive or conservative and the aggregate difference was reasonable.[81] Despite the fact that RMBS had a larger trading market and a more straightforward valuation process, the Examiner found a greater variance between his independent RMBS valuations and Lehman’s RMBS valuations than between his independent RWL valuations and Lehman’s RWL valuations and yet still did not find any colorable claims.

c. Collateralized Debt Obligations

“. . . each trader had a different method for valuing the CDOs and there was no consistency from desk to desk.”

The Examiner identified several problems with various aspects of Lehman’s valuation of its Collateralized Debt Obligations (“CDOs”) and determined that the PCG was not a strong check against the valuations made by the trading desks. Nevertheless, there was insufficient evidence “to support a finding that Lehman’s CDO valuations were unreasonable.”[82]

Lehman’s internal philosophy regarding CDOs was to “distribute not retain.”[83] The Examiner evaluated Lehman’s reasonableness in two steps:

1. By analyzing Lehman’s price verification, specifically the PCG’s process and Ernst and Young’s review of the PCG’s process; and
2. By analyzing Lehman’s CDO, Caego, a 2007 securitization that constituted over one-third of Lehman’s CDO assets that it was unable to sell.[84]

The values that Lehman reported for its CDOs were determined by the desk traders.[85] Much like RWLs and RMBS, each trader had a different method for valuing the CDOs, and there

[80] *Id.*
[81] *Id*.
[82] Examiner’s Report, Vol. 2, at 568; *see* Appendix C.
[83] *Id.* at 540.
[84] *Id.* at 542.
[85] Examiner’s Report, Vol. 2, at 543.

was no consistency from desk to desk.[86] The PCG performed a monthly independent analysis of the traders' price valuations, paying closer attention to the marks toward the end of each quarter.[87] The PCG price-checked only 78% of the CDOs valued by the desk traders.[88]

While this was Lehman's primary check of the traders' valuation, the PCG had insufficient resources to test the CDO positions comprehensively.[89] The PCG did not have the "same level of quantitative sophistication as many of the desk personnel who developed models to price the CDOs."[90] Furthermore, the PCG did not have its own models and could not replicate or create the models used by the desk traders at Lehman.[91] As a former Vice President and Head of the Credit Valuation group tellingly stated to the Examiner, "[W]e're not quants."[92]

The PCG used four methods to test the desk traders' pricing:

1. "The preferred method was to use executed trade activity to provide a basis valuation."[93] (Trades occurring four to six weeks before the month's end were considered reasonable);[94]

2. By looking to third party providers for the prices they may have obtained;

3. By creating a model using the Intex Cash Flow engine or interest-only models that looked to the underlying assets of the CDOs;[95]

4. By using interest-only analysis and the ABX indices.[96]

Because the Intex method was unreliable, most members of PCG attempted to avoid using it when pricing CDOs.[97] Additionally, the Examiner did not investigate the models used by the

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[86] *Id.* at 543.
[87] *Id.* at 543.
[88] *Id.* at 549.
[89] *Id*. at 547.
[90] *Id.*
[91] *Id.* at 549.
[92] Examiner's Report, Vol. 2, at 550.
[93] *Id.* at 543-44.
[94] *Id.* at 544.
[95] *Id.*
[96] *Id.* at 545.
[97] *Id.* at 544.

PCG for all of the CDOs, only the largest CDOs.[98]

After the PCG conducted its independent valuation, it would check its numbers against the desk traders' numbers.[99] If the variance was too great, the PCG would meet with the trader to determine the "appropriate" price.[100] While one-third of Lehman's CDOs were tested using one of the two preferred methods, 25% of the CDOs were not "affirmatively priced" by the PCG and were instead approved without question "because the desk had already written down the [CDO] position significantly."[101] Approximately thirty-five total CDO positions were not checked by the PCG due to previous write downs, accounting for nearly $9 million.[102]

Ceago was the largest CDO position held by Lehman through May and August of 2008, consisting of over $520 million of the $1.2 billion of CDOs in those months.[103] While Lehman's internal philosophy of CDOs was to "distribute not retain,"[104] Lehman retained 97% of this CDO tranche in May and August of 2008.[105] The PCG valued Ceago "by taking the market value of the underlying collateral and subtracting the value of the other tranches in the deal."[106] Although the senior tranches were valued with little variance from the trader's desk, the junior tranches of Ceago posed more of a problem.[107]

For the riskier junior tranches of the Ceago position, the PCG used discount coupon cash flows taken from the Caego at "the swap rate corresponding to the projected tenor of the bonds."[108] The discount rates used by the PCG were "significantly understated" because a lower

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[98] Examiner's Report, Vol. 2, at 545 n.1939.
[99] *Id.* at 545.
[100] *Id.*
[101] *Id.* at 548.
[102] *Id.* at 549.
[103] *Id.* at 553.
[104] Examiner's Report, Vol. 2, at 540.
[105] *Id.* at 554.
[106] *Id.* at 555.
[107] *See generally, Id.* at 555-56
[108] *Id.* at 556.

discount rate was placed on the junior tranches than the senior tranches.[109] The PCG did not use an Intex model price to test the junior Ceago tranches even though its Policy & Procedures instructed it to do so.[110] A senior member of the PCG stated he was not sure why the PCG did not use a waterfall cash flow analysis, such as Intex, and instead used this discounted tenor assumption in valuating the junior Ceago tranches.[111] When conducting his own independent evaluation of the Ceago tranches, the Examiner noted, "[T]he variances for these . . . tranches are large enough to challenge the reasonableness of Lehman's valuation."[112] Lehman's process was not unreasonable because the PCG's and desk traders' variances were only a combined 3% and the PCG was reviewed by Ernst & Young.[113] The Examiner concluded, "The inherent difficulty of pricing Lehman's CDO portfolio in the unprecedented market conditions of 2008 makes it difficult to support a finding that Lehman's valuation of its CDO portfolio was unreasonable."[114]

d. Derivatives

As of May and August 2008, Lehman held more than 900,000 derivatives worldwide, combining for a net value of approximately $21 billion as of May 31, 2008.[115] Although Lehman did not publish a third quarter report in 2008, the PCG's documents show that, as of August 31, 2008, Lehman had valued "its derivative assets to be $46.3 billion and its derivative liabilities to be $24.2 billion, for a net value of $22.2 billion."[116] This valuation constitutes almost a 100% increase from the net value of $12.974 billion Lehman reported on November 30,

[109] *Id.* This would seem to indicate that the junior tranches are less risky than the senior tranches.
[110] *Id.* at 558.
[111] Examiner's Report, Vol. 2, at 558.
[112] *Id.* at 560.
[113] *Id.* at 567-68.
[114] Examiner's Report, Vol. 2, at 567.
[115] *Id.* at 569.
[116] *Id.* at 572.

2007.[117]

The valuation method for derivatives differed depending on the underlying assets on which the derivative contract was based, and no single method can be used to price all derivatives.[118] As a result, the Examiner drew no conclusions regarding Lehman's methodology; rather, his findings pertain only to the final valuations for the derivative positions.[119]

No colorable claims were found regarding the valuation of derivatives because the "nature of derivative transactions with sophisticated counterparties, who, through credit support annexes, will agree with or dispute marks in their own self-interest, limits the possibility of misstatement."[120] Lehman, like most other financial institutions, executed credit support annexes ("CSAs") with its financial institution counterparties to reduce counterparty credit exposure in its derivative transactions.[121] Additionally, there were no colorable claims because "a review of the internal price verification performed by Lehman's Product Control Group provides a further level of assurance that the derivative values reported by Lehman in 2008 were reasonable."[122]

Specifically,

> The Capital Markets Finance group was responsible for daily revenue analysis and reporting, validation of inventory valuations and interfacing with internal and external auditors and regulators. The Product Control Group performed price verification procedures for derivatives on a monthly basis. The Complex Derivatives Review Committee reviewed complex transactions to ensure that they were modeled, valued and booked appropriately. Finally, the Model Control

[117] *Id.* at 572.
[118] *Id.* at 573.
[119] *Id.* at 573.
[120] Examiner's Report, Vol. 2, at 573-74.
[121] *Id.* at 574; *See Id.* at 575-76 (CSAs typically provide a 'threshold amount' of risk exposure, below which a counterparty need not post collateral. For example, if Lehman valued a derivative contract at a present value of $20 million, and the CSA provided for a $5 million threshold, then Lehman's counterparty would post $15 million in collateral. However, derivative counterparties seek to avoid posting collateral because it diminishes liquidity and imposes opportunity cost.[121] Therefore, a counterparty would not accept Lehman's claim of a derivative's value without performing its own analysis, and vice-versa.) (internal citations omitted).
[122] Examiner's Report, Vol. 2, at 573-574.

> Committee reviewed and approved the models used to mark derivatives positions.[123]

As with its other assets, Lehman's trading desks determined the marks it reported for its derivatives assets, "and these marks were subject to price testing by Lehman's [PCG]."[124] Due to the large number of derivatives held by Lehman and the different valuation methods, the Examiner focused on the PCG's price verification for derivatives.[125] Price verification performed by the PCG included "the use of independent market quotes from vendors, benchmarking against similar assets, recent trading activity and collateral marks."[126]

The Examiner analyzed the PCG's process for its portfolio of credit default swaps ("CDS") written on asset-backed securities ("ABS") and CDOs. As of May 31, 2008, the market value of these positions was approximately $5.4 billion, or roughly 25% of the aggregate value of Lehman's derivative portfolio.[127]

> To perform price verification of these assets, Lehman's Product Control Group obtained third-party marks for individual CUSIPs[128] from data providers Fitch Ratings ("Fitch") and Markit. Where the Product Control Group had only one Fitch or Markit price for a particular security, it adopted that price as its mark. Where both Fitch and Markit prices were available, the average of the two was used.[129]

Although there was some variance between the desk marks and the PCG's valuations, "there [did] not appear to be a bias towards either under- or overstatement."[130] As of May 31, 2008, the variance on valuations for CDS on ABS was $80 million, and the variance on valuations for

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[123] *Id.* at 579.
[124] *Id.* at 578.
[125] *Id.* at 578.
[126] *Id.* at 579.
[127] *Id*. at 580.
[128] Examiner's Report, Vol. 2, at 580 n.2054 ("CUSIP refers to the 9-character alphanumeric security identifier established by the Committee on Uniform Security Identification Procedures.").
[129] *Id.* at 580.
[130] *Id.* at 580-81.

CDS on CDO was negative $20 million.[131] As of August 31, 2008, the variations were $80 million and $10 million, respectfully.[132] These variations were "immaterial relative to the size of Lehman's CDS portfolio in both May and August of 2008."[133]

e. Corporate Debt Positions

"Reliance on trades that did not occur, quality control errors, and no testing of internally-determined credit ratings for debt instruments."

A majority of Lehman's corporate debt positions were categorized as "Level 2" assets because of the lack of readily available market data and external quotes.[134] As a result of the unavailability of market data, valuing a "Level 2" asset requires an analysis of fundamental financial data and prospects of the company that issued the debt.[135] It was virtually impossible for the Examiner to complete a full analysis of every single debt position because it would require an extensive investigation into financial data of individual companies.[136] Although the Examiner found issues with Lehman's corporate debt price testing, after reviewing a small sample of Lehman's largest corporate debt positions, the Examiner found that the issues were "not biased toward either under- or overvaluation and [did] not, by themselves, suggest that . . . the value of any corporate debt position was unreasonable."[137]

The corporate debt valuation system lacked a testing process for relevant assumptions and was generally unorganized, which can lead to a greater potential for errors.[138] There were three weaknesses of the PCG's corporate debt price testing: "reliance on trades that did not

[131] *Id.* at 581.
[132] *Id.* at 582.
[133] *Id.*
[134] Examiner's Report, Vol. 2, at 583 (As of May 31, 2008, 89% of Lehman's approximately $50 billion of corporate debt assets were Level 2 assets, and as of August 31, 2008, the entire $41.7 billion corporate debt portfolio was comprised of Level 2 assets); "Level 2 assets have observable events to provide pricing, such as comparable sales." Examiner's Report, Vol. 1, at 62 n.171.
[135] *Id.* at 583-84.
[136] *Id.*
[137] *Id.* at 584-85.
[138] *Id.* at 589.

occur, quality control errors, and no testing of internally-determined credit ratings for debt instruments."[139] The use of non-trades in the valuation was relatively innocuous. In May 2008, fifty-seven debt transactions between Lehman entities were included in the price testing workbooks.[140] An internal transfer such as this would not accurately reflect the market value and would not normally be caught by the review process unless it exceeded a test variance.[141] However, even if the marks are identical between internal and third-party transfer data, using internal transfers would make it appear that there were a greater number of trades behind the valuation of the asset, which would lead to a higher confidence in the marks.[142]

Lehman's assessment of an internal credit rating was an essential part of valuing debt instruments that were not rated by a rating agency.[143] The internal credit rating determined a benchmark discount rate for use with CDS Matrix or CR Matrix valuation.[144] According to a product controller, "[PCG] did not have any established procedures to test these internal ratings."[145] In one instance, PCG assessed an OZ Management security to have an internal credit rating of AA.[146] This AA rating came less than one year after a Commitment Committee memo gave the same OZ Management investment an implied BBB- rating.[147] If the correct rating were BBB- instead of AA, "the result would have been an overstatement of value of the investment."[148] On another occasion, data from an incorrect ticker was used to verify the trading desk's mark for a $250 million position in a term loan.[149] This error persisted for three months,

[139] *Id.*
[140] Examiner's Report, Vol. 2, at 590.
[141] *Id.* at 590.
[142] *Id.* at 591.
[143] *Id.* at 592.
[144] *Id.*
[145] *Id.*
[146] Examiner's Report, Vol. 2, at 593.
[147] *Id.*
[148] *Id.* at 593.
[149] *Id.* at 591.

but never received any further attention because the variance was not significant enough to put PCG on alert.[150] Despite these readily identifiable issues, the Examiner determined that it was not a prudent use of resources to perform independent valuation of each of Lehman's more than 10,000 corporate debt positions.[151] The Examiner concluded that all of the issues were related to the price verification process and did "not directly suggest that the valuation of Lehman's corporate debt positions, as determined by the trading desk, was unreasonable."[152] Further, no conclusions were made "as to the reasonableness of Lehman's valuation of any particular corporate debt position or the valuation of its corporate debt portfolio as a whole.[153]

f. Corporate Equities Positions

"Impaired debt with no equity mark down and static marks."

The Examiner limited his review of Lehman's corporate equities positions to common and preferred securities in public and private companies, even though Lehman considered corporate equities to include "equity options, investments in general partnerships and limited partner positions in private equity or hedge funds."[154] Therefore, "corporate equities," as used in this report, will only include the positions analyzed by the Examiner. As of May 31, 2008, Lehman held 33,174 corporate equity positions that it valued at $47.5 billion, approximately 56% of which were "Level 1" assets.[155] By August 31, 2008, Lehman's total number of positions increased to 39,205, but the value had decreased to $43.2 billion, approximately 60% of which were "Level 1" assets.[156] With respect to its publicly traded positions, Lehman's marks

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150 *Id.* at 591-592.
151 *Id.* at 593.
152 *Id.* at 594.
153 Examiner's Report, Vol. 2, at 594.
154 *Id.* at 594.
155 *Id.* at 594-95; "Level 1 assets have readily available markets to provide prices and liquidity, such as exchange-traded equities." Examiner's Report, Vol. 1, at 62 n.171.
156 *Id.* at 595.

"closely tracked publicly-quoted prices," therefore there was insufficient evidence to conclude these marks were unreasonable.[157]

The Examiner concluded that it would not be a prudent use of the estate's resources to complete a full analysis of each individual privately-held company and therefore limited his analysis to Lehman's "15 largest Level 2 and 15 largest Level 3 positions on May 31, 2008, and August 31, 2008."[158] Through this review the Examiner found two main issues: impaired debt with no equity mark down and static marks.[159] Despite finding these issues, the Examiner did not conclude that any particular equity position was unreasonable.[160] However, "further review of Lehman's corporate equity positions may be warranted if supporting documents and sufficient time and resources are available."[161]

In general, when there is an impairment of value of debt for a company due to increased risk, "the value of the company's equity should also be reduced due to the same risk."[162] Bawag PSK ("Bawag") is a privately held financial service company operating principally in Austria which was found to have been assessed an improper equity mark after an impairment of debt.[163] Lehman ultimately decided against a 10% write-down of Bawag's equity even after having already taken a write-down on the corresponding debt component.[164] "It is highly irregular for an equity position to remain unchanged when a debt security sitting higher in the capital structure is written down since both securities would likely be impacted by the same risk factors

[157] *Id.*
[158] *Id.* at 595-96, 601; "Level 3 assets have no readily available pricing mechanism and therefore are less liquid than Level 1 and 2 assets." Examiner's Report, Vol. 1, at 62 n.171.
[159] *See* Examiner's Report, Vol. 2, at 601-606.
[160] *Id.* at 601.
[161] *Id.*
[162] *Id.* at 601-02.
[163] *Id.* at 602.
[164] *Id.*

that cause a decrease in the value of the debt instrument."[165]

There were several instances of static marks, where "the valuations of some of Lehman's corporate equity positions remained unchanged for up to fifteen months."[166]

> Given day-to-day fluctuations in the market, economic variables, and the circumstances of any particular company and its business operations, it is highly improbable that the value of a company, and therefore the value of Lehman's equity position in it, would remain constant over an extended period of time.[167]

Bawag was marked by Lehman at 100 cents on the dollar in both May and August of 2008.[168] From this the Examiner implies that Lehman marked its position in Bawag at 100 cents on the dollar for a fifteen-month period before bankruptcy.[169] There were an additional 343 examples of static marks from February to August 2008, totaling $455 million in investments, where the mark for a corporate equity position did not change.[170] Despite these facts, no conclusions were drawn "about the reasonableness of the valuation of any particular one of these positions."[171] However, these static marks "may warrant further investigation."[172]

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165 *Id.*
166 Examiner's Report, Vol. 2, at 603.
167 *Id.*
168 *Id.*
169 *Id.*
170 *Id.* at 604.
171 *Id.*
172 Examiner's Report, Vol. 2, at 604.

III. Lehman's Acquisition and Valuation of Archstone

"Lehman's failure to recognize and react to market changes."

The best representation of Lehman's risk management and valuation process is its acquisition of Archstone, a $22 billion joint venture with Tishman Speyer.[173] Notably, Archstone was Lehman's largest commercial real estate investment.[174] Archstone was a REIT that was engaged in the acquisition, development, and operation of apartment communities.[175] There were a number of issues with the timing of Archstone's acquisition and the profitability of the investment as a whole due to the real estate and credit markets at the time.[176] These factors made Archstone a risky investment that ultimately did not meet profitability expectations. To determine the reasonableness of Lehman's valuation practices, the Examiner assessed a reasonable range of values because of the absence of directly applicable market data.[177]

The core problem with Archstone's valuation was Lehman's failure to recognize and react to market changes. For example, Lehman overestimated its cash flow assumptions despite significant evidence supporting different numbers.[178] Lehman conducted an internal analysis which showed that the rent growth rate it was applying to Archstone was 1.9 to 3.5 percentage points higher than comparable competitors' assumptions, yet Lehman did not adequately adjust its own assumptions.[179] Further, although Lehman's internal procedures required it to compare assets to its publicly traded peers, Lehman only did this in the second quarter of 2008.[180] However, it was not unreasonable not to undertake such an analysis.[181] Moreover, the PCG

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[173] *See supra*, at.7.
[174] Examiner's Report, Vol. 2, at 356.
[175] *Id.* at 364.
[176] *See Id.* at 391.
[177] *Id.* at 360.
[178] *Id.* at 431-32.
[179] *Id.* at 424.
[180] Examiner's Report, Vol. 2, at 441-42.
[181] *Id.* at 441.

deferred to the Business Desk's valuations due to lack of knowledge of the investment and because it did not have its own model to test the assumptions.[182] As a result, the PCG did not serve as an effective independent check on Archstone valuations.[183]

Overall, the Examiner found Lehman unreasonably overstated Archstone's value for each of the first three quarters of 2008.[184] In the first quarter, Lehman overvalued Archstone by $200 million to $450 million.[185] Archstone was overvalued by $200 million to $500 million in the second quarter.[186] And in the third quarter, Lehman overvalued Archstone by $140 to $400 million.[187] Although Lehman's valuation of Archstone for purposes of solvency analysis was unreasonable, "there is insufficient evidence to support a colorable claim that any Lehman officer acted with an intent to produce incorrect values" or was reckless in their valuation.[188]

IV. CONCLUSION

The Center's review of the Examiner's Report reveals Lehman's systemic disregard of its internal risk limits and improper valuation of its assets. While the Examiner noted that individual actions taken by Lehman regarding its risk management and valuation did not give rise to any colorable claims, the big picture has disturbing implications. Specifically, the legality of the individual decisions, taken as whole, grants corporations a license to fail. The findings presented above, all of which were permissible, can (and likely will) be replicated without any legal consequence.

[182] *Id.* at 363, 418.
[183] *Id.* at 419.
[184] *Id.* at 361-62.
[185] *Id.*
[186] Examiner's Report, Vol. 2, at 362.
[187] *Id.*
[188] *Id*. at 363.

Appendix A: Principal Transaction Group (PTG) Portfolio

To value its PTG portfolio, Lehman considered the amount of "future expected cash flows expected from the asset and an investor's willingness to accept the risk that the asset will not produce these cash flows."[189] These considerations were reflected in Lehman's "mark-to-market" valuation process, which had two components: "marking to credit," which reflected changes in the collateral value due to changes in the business plan, and "marking to yield," which reflected changes in the market conditions that affect the value of the asset.[190] Lehman's valuation process began with TriMont Real Estate Advisors ("TriMont"), "providing asset-specific information to the PTG business desk and Product Control."[191] "As of May 2008, TriMont serviced over 90% of Lehman's PTG assets,"[192] and the information provided by TriMont was relied upon by Lehman to value the PTG positions.[193]

The Examiner's financial advisor was only able to identify TriMont's method of valuation for 473 of the 741 (64%) PTG positions because the data was incomplete.[194] "Among these 473 positions, the valuation method used by TriMont can be separated into two general categories: historical cost-based valuation methods and market-based methods."[195]

> However, one particular market-based method for calculating collateral value was the focus of PTG and TriMont during this time – the discounted cash flow method that served as the basis for [internal rate of return] models. . . . Lehman and Trimont were in the process of incorporating IRR models throughout 2007 and 2008. Because of the increased use of IRR models, and the effect that this switch had on Lehman's valuation of PTG assets, the Examiner . . . focused on this method in evaluating the reasonableness of Lehman's PTG valuations during the second and third quarters of 2008.[196]

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[189] Examiner's Report, Vol. 2 at 303.
[190] *Id*. at 304, n.1102, 1104.
[191] *Id*. at 306.
[192] *Id*.
[193] *Id*. at 307.
[194] Examiner's Report, Vol. 2 at 308. (The Examiner does not explain why the data was not available.).
[195] *Id*. at 308-09.
[196] Examiner's Report, Vol. 2 at 310.

Until 2007, Lehman primarily used the Cap * 105 method for valuing the collateral underlying its PTG positions.[197]

> Cap * 105 calculated the current capitalization of the underlying property (*i.e.*, outstanding debt plus equity invested to date), and then multiplied this number by 105% to estimate the value of the collateral as of the specific valuation date. The additional 5% represented the presumed appreciation of the collateral.[198]

As a result of presuming appreciation, Cap * 105 overvalued PTG collateral when real estate values began to decline in 2007.[199] By the end of 2007, Lehman's Product Control Group reached the conclusion that the Cap * 105 "approach may not be appropriate."[200] Lehman urged TriMont to start using market-based methodologies, referred to as IRR models.[201] Nevertheless, in March 2008, the Cap * 105 method was still widely used and relied upon by Lehman.[202]

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[197] *Id*. at 312.
[198] *Id*. at 312-13.
[199] *Id*. at 313-14.
[200] *Id*. at 314.
[201] *Id*. at 314.
[202] Examiner's Report, Vol. 2 at 317-18.

Appendix B: Residential Whole Loans (RWLs) and Residential Mortgage Backed Securities (RMBS)

"RWLs are residential mortgages from around the world that can be traded and pooled as the first stage in the securitization process, the goal of which is the creation of a [Residential Mortgage Backed Security]."[203] Pools of RWLs are generally homogenous but mitigate the risk of regional price declines by diversifying geographically.[204] "RWLs are created by loan originators that approve mortgages and lend directly to homeowners."[205] Thereafter, government entities (e.g. Fannie May) and private firms (e.g. Goldman Sachs) purchase these pooled mortgages from the loan originators.[206] Investors usually carve up the pools and sell the securities, as opposed to holding onto the RWLs as investments for extended periods of time.[207]

[203] *Id*. 494-95.
[204] *Id*. 495
[205] *Id*. 495
[206] *Id*. 495.
[207] *Id*.

Appendix C: Collateral Debt Obligations (CDOs)

CDOs are classified as a category of asset-backed securities ("ABS").[208] A CDO is distinguished by the category of asset on which it is based. CDOs that are backed by RMBS are generally referred to as "ABS CDOs."[209] Alternatively, CDOs that are backed by commercial mortgage-backed securities ("CMBS") are termed "CRE CDOs."[210] Lehman valuated each ABS position separately for financial reporting purposes.[211] However, for the purposes of this report, the Examiner treated Collateralized Loan Obligations and Collateralized Bond Obligations as part of the CDO valuation and did not investigate them separately.[212] "[T]he overall methods were similar across ABS classes."[213] The assets predominately backing Lehman's CDOs were RMBS and CMBS constituting $25 billion in 2007 and $17 billion in 2008.[214]

208 Examiner's Report, Vol. 2 at 538.
209 *Id.*
210 *Id.*
211 *Id.* at n.1915.
212 *Id.*
213 *Id.*
214 Examiner's Report, Vol. 2 at 539.