ISSUES IN ACCOUNTING EDUCATION
Vol. 27, No. 2
2012
pp. 441–459

American Accounting Association
DOI: 10.2308/iace-50126

Lehman on the Brink of Bankruptcy: A Case about Aggressive Application of Accounting Standards

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ABSTRACT: In September 2008, Lehman became the largest company in U.S. history to file for bankruptcy. Nine months earlier, Lehman had reported record revenue and earnings for 2007, and had started the year with a market capitalization of over $30 billion. Lehman's precipitous fall has been attributed to a high-risk business strategy and to aggressive interpretation of accounting rules. Lehman was both a victim of—and an important contributor to—the worst U.S. economic recession since the Great Depression, and the firm's accounting choices warrant scrutiny.

This case is structured around collateralized short-term borrowings, commonly used by financial institutions, called repurchase agreements. Lehman modified the terms of the standard agreement and used an aggressive interpretation of SFAS No. 140 to account for these modified agreements as a sale of the collateral. These transactions, called Repo 105s, affected the firm's reported financial position. The case requires students to evaluate those effects, interpret financial ratios, critically read authoritative accounting literature, and consider important questions about auditors' responsibilities. Key issues include the relative merits of principles-based versus rules-based accounting standards, corporate governance, ethics, materiality, and whistleblowing.

Keywords: Lehman; Repo 105; collateralized borrowings; SFAS No. 140; financial leverage.

INTRODUCTION

Lehman Brothers was founded in the mid-19th century as a cotton trading company. The latest entity (Lehman Brothers Holdings Inc.) emerged from a spin-off from American Express in 1994. This company grew quickly, and for fiscal year 2007, the company reported record income of over $4 billion on revenue of over $60 billion. In early 2008, Lehman's stock was trading in the mid-sixties with a market capitalization of over $30 billion. Over the next eight months, Lehman's stock lost 95 percent of its value and was trading around $4 by September

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We thank the editor, associate editor, and two reviewers for their helpful insights, comments, and suggestions. We also acknowledge Wesley R. Bricker for his helpful comments, and our accounting students, who completed the case and provided us valuable feedback.

Published Online: January 2012

12, 2008. Three days later, Lehman filed for bankruptcy protection. By some measures, Lehman was the largest company to fail in U.S. history.

In March 2010, Lehman's bankruptcy examiner, Anton Valukas, issued a 2,200-page report that outlined the reasons for the Lehman bankruptcy (Valukas 2010). The Examiner's Report also provides insight into how Lehman's deteriorating financial position led to allegedly misleading financial reporting practices, including a type of collateralized short-term borrowing arrangement that Lehman dubbed "Repo 105." The Examiner's Report includes interviews with key Lehman personnel and provides accounting students a rare "inside" look at the mechanics and dynamics of aggressive accounting practices when carried out by a large and sophisticated company. In December 2010, the Attorney General for the State of New York filed a lawsuit against Lehman's auditors, Ernst & Young LLP (hereafter, E&Y).[1] In April 2011, Valukas testified before a subcommittee of the U.S. Senate Committee on Banking, Housing, and Urban Affairs, in a hearing on the role of the accounting profession in preventing another financial crisis (Valukas 2011). This case summarizes information from these sources and requires students to address questions of fact, as well as conceptual issues.

COMPANY BACKGROUND

Originally, Lehman's business model was that of a brokerage firm and underwriter. In that role, Lehman acted as an agent, marketing securities and acquiring assets on behalf of third parties. In 2006, Lehman's management and Board of Directors decided to increase the firm's risk profile and pursue a higher growth strategy. Thereafter, Lehman acquired assets for its own investments, hence, internalizing the risk and returns of those investments. That is, Lehman transformed itself from a "moving" business, in which it held securities only for a short time period, to a "storage" business, in which it managed securities over a much longer period (Valukas 2010, Volume 1, p. 43).

According to a senior Lehman executive, the company pursued an aggressive 13 percent growth rate in revenues (Valukas 2010, Volume 1, pp. 61–62). This business strategy was high-risk in light of Lehman's low equity and high leverage. The increased risk was borne by Lehman's investment in long-term assets, primarily commercial real estate, leveraged loans, and illiquid private equity with high growth potential. When the subprime mortgage crisis hit the U.S. in 2006, Lehman undertook an aggressive strategy of "doubling down," rather than pulling back and diversifying. By doing so, it violated its own internal controls on risk management. Lehman increased its holdings in these long-term, illiquid, high-risk investments from $87 billion in 2006 to $175 billion at the end of the first quarter of 2008 (Valukas 2010, Volume 1, p. 57). These newer investments increased Lehman's business risk in several ways. First, these assets were difficult to liquidate in an economic downturn, primarily because a ready market did not exist and they could only be sold at steep losses. Second, many lenders steeply discount the collateral value of illiquid assets, making them less valuable as collateral against borrowings. Finally, there was no feasible way to hedge these assets.

In order to finance these long-term investments, Lehman needed to borrow billions of dollars. In late 2007, the company held assets of $700 billion on equity of $25 billion, with $675 billion of liabilities, most of which were short-term. The mismatch between short-term debt and long-term illiquid investments required Lehman to continuously roll over its debt, which increased the firm's business risk. In fact, Lehman borrowed tens of billions of dollars on a daily basis (Valukas 2010, Volume 3, p. 751). Market confidence in a company's viability and debt-servicing ability is critical

[1] A copy of the lawsuit is available at: http://www.ag.ny.gov/media_center/2010/dec/ErnstYoungComplaint.pdf E&Y's response to the lawsuit is available at: http://www.ey.com/US/en/Newsroom/News-releases/Ernst—Young-Response-to-New-York-Attorney-General-Complaint

for the company to access funds of this magnitude. It was imperative for Lehman to maintain good credit ratings from agencies such as Moody's and Standard & Poor's.

As economic conditions worsened and markets further declined in 2007–2008, Lehman's strategy proved to be a failure. Lehman had no choice but to reduce its exposure and leverage. The more highly leveraged a company is, the more important it is for the company to act quickly when market conditions turn against it. However, Lehman had difficulty selling its illiquid assets and, therefore, was unable to reduce its leverage rapidly through market transactions. Lehman could only offload assets at a steep loss, which would have a double-negative impact. First, recognizing losses on the sale of these assets would reduce equity. Second, the market's perception of the quality and value of Lehman's remaining assets would be negatively affected, making it more difficult for Lehman to borrow needed funds at a feasible cost.

In response to these difficulties, Lehman developed and engaged in repurchase agreement transactions that the company called "Repo 105" transactions. These transactions helped Lehman improve its reported leverage ratios.

REPURCHASE AGREEMENTS

Sale and repurchase agreements (repos) are commonly used by financial companies to finance their security position by transferring securities as collateral for short-term borrowings of cash. The transaction is completed in two phases. In the first phase, the borrower receives cash, records a liability, and transfers custody of securities to the lender as collateral for the loan. In the second phase, at a date determined up front, the company repays the borrowed amount with interest to the lender and repossesses the securities. To reduce the risk borne by the lender, the amount of securities transferred as collateral slightly exceeds the amount borrowed. This slight excess of the amount of collateral over the amount borrowed is known as the "haircut." Under Statement of Financial Accounting Standards (SFAS) No. 140, the transaction described above would be regarded as a secured borrowing primarily because the borrower retains control over the securities (Financial Accounting Standards Board [FASB] 2000). The transaction would also be regarded as a collateralized borrowing under International Accounting Standard (IAS) No. 39 (International Accounting Standards Board [IASB] 2003).[2] As an example, if Lehman put up $1.02 million of collateral to borrow $1 million and incurred $1,000 of interest expense, the journal entry would be (all amounts in thousands):

Cash	$1,000	
Collateralized Financing		$1,000

As a separate transaction, Lehman would use the cash it just borrowed to settle short-term borrowings from other creditors. This transaction would be recorded as follows:

Short-Term Borrowings	$1,000	
Cash		$1,000

The subsequent repayment would be recorded as:

Collateralized Financing	$1,000	
Interest Expense	$1	
Cash		$1,001

[2] See paragraphs 9, 98, and 100 of SFAS No. 140, and paragraphs 20 and 21 of IAS No. 39.

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The amount of collateral does not constitute a part of the journal entry, although total securities pledged as collateral would normally require footnote disclosure.

For a portion of its repo transactions, Lehman modified the terms of a normal repurchase agreement by taking a bigger haircut (i.e., the excess of securities collateralized over cash received). While a typical haircut was about 2 percent for the period under discussion (and in the example above), Lehman created agreements that took haircuts of 5 percent for fixed income securities and 8 percent for equity securities; hence, the terminology that Lehman used for these transactions: Repo 105 and Repo 108 (Valukas 2010, Volume 3, p. 732).[3] For example, if Lehman borrowed $1 million, the company would transfer either $1.05 million of fixed income securities or $1.08 million of equity securities to the lender. By taking this larger haircut, Lehman characterized these transactions as sales of securities in accordance with Lehman's interpretation of SFAS No. 140.[4] Instead of classifying these transferred securities as collateral for the loan, to be returned upon the settlement of the loan, Lehman would record the transfer as a sale with an agreement to repurchase on a specified date. As a separate transaction, Lehman would use the cash it just borrowed to settle other liabilities. The borrowing phase of the Repo 105 transaction would be recorded as follows (all amounts in thousands):

Cash	$1,000	
Option to Repurchase	$50	
Investment Securities		$1,050

Similar to the previous example, Lehman would use the cash it just received to settle short-term borrowings from other creditors. This transaction would be recorded as follows:

Short-Term Borrowings	$1,000	
Cash		$1,000

The repayment transaction would be recorded as:

Investment Securities	$1,050	
Interest Expense	$1	
Option to Repurchase		$50
Cash		$1,001

Lehman had vetted its interpretation of how to account for repurchase agreements under SFAS No. 140 with E&Y prior to adopting a formal Repo 105 accounting policy (Valukas 2010, Volume 3, p. 765). Additionally, Lehman acquired an opinion letter supporting its accounting treatment of Repo 105 transactions from Linklaters, a British law firm.[5]

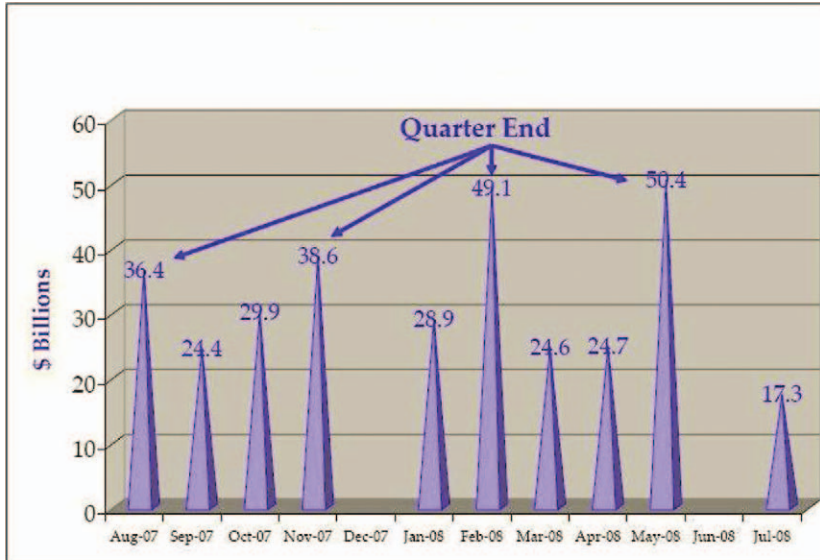
There were many similarities between a Repo 105 transaction and an ordinary repurchase agreement. For instance, in ordinary repo transactions, the borrower typically continues to receive

[3] In the Examiner's Report, the business press, and in this paper the term "Repo 105" often denotes Lehman's combined Repo 105 and Repo 108 activity.

[4] The relevant section of SFAS No. 140 includes paragraph 218.

[5] Despite Lehman's sale of $1.05 million of securities for $1 million cash, no gain or loss was recognized on the transaction because at the time of the sale, Lehman entered into a binding commitment to buy back those same securities at a later date for $1 million. Hence, even though Lehman would "sell" $1.05 million of securities for $1 million with an apparent loss of $0.05 million, the loss is offset by an apparent $0.05 million gain on the commitment to purchase the same $1.05 million of securities for $1 million (a derivative asset). Recognizing the $0.05 million gain from the commitment exactly offsets the loss. See Lehman Brothers Holdings Inc., Accounting Policy Manual Repo 105 and Repo 108 (Sept. 9, 2006), pp. 7–8 [LBEX-DOCID 3213290], as referenced in Valukas (2010, Volume 3, p. 776, footnote 2990).

FIGURE 1
Repo 105 Usage



the income from coupon payments of the securities that were transferred to the lender as collateral. Similarly, during the term of a Repo 105 transaction, Lehman continued to receive the stream of income through coupon payments from the securities it transferred. Additionally, just as in an ordinary repo transaction, Lehman was obligated to "repurchase" the transferred securities at a specified date. Moreover, Lehman used the same documentation to execute both Repo 105 and ordinary repo transactions, and these transactions were conducted with the same collateral agreements and substantially with the same counter-parties (Valukas 2010, Volume 3, p. 746).

Repo 105 was a more expensive source of financing compared to ordinary repo agreements because of the opportunity cost of the increased collateral, as well as transaction costs incurred by channeling these transactions through Lehman's British subsidiary. Consequently, its usage was timed around the end of reporting periods. The Examiner's Report analyzed the intra-quarter data on the usage of Repo 105 and concluded that its usage spiked at quarter-ends and fell off on an intra-quarter basis. The amount of Repo 105 activity at period-end from late 2007 to mid-2008 ranged from $39 billion to $50 billion. Figure 1 is excerpted from the Examiner's Report (Valukas 2010, Volume 3, p. 875).

MATERIALITY AND LEVERAGE

The leverage ratio is a widely accepted measure of the additional risk placed on common stockholders as a result of the decision to finance operations with debt. Lehman defined its leverage ratio as assets (net of certain items) divided by equity. The items that were netted out in the numerator of the leverage ratio were: cash and securities segregated and on deposit for regulatory or other purposes, securities received as collateral, securities purchased under agreements to resell, securities borrowed, and identifiable intangible assets and goodwill (Valukas 2010, Volume 3, p. 734).

The importance of the leverage ratio in analyzing Lehman's financial statements was widely recognized. In fact, the Global Treasurer of Lehman remarked to the bankruptcy examiner that "ratings agencies were 'most interested and focused on leverage'" (as quoted in Valukas 2011,

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TABLE 1

Repo 105 Usage and Net Leverage

Date	Amount of Repo 105 Usage	Reported Net Leverage[a]
Q4, 2007	$38.60 billion	16.1
Q1, 2008	$49.10 billion	15.4
Q2, 2008	$50.38 billion	12.1

[a] As an example of the derivation of the net leverage ratio, refer to pp. 29–30 of Lehman Brothers Holdings Inc. Form 10-K for the fiscal year ended November 30, 2007.

3–4). In addition, E&Y identified a separate materiality threshold specifically for leverage, defining materiality as an amount that "moves" net leverage by a tenth of 1 percent. Table 1 shows data from the Examiner's Report on the usage of Repo 105, and Lehman's reported leverage ratio (Valukas 2010, Volume 3, p. 748)

Despite their materiality threshold for leverage, E&Y's lead audit partner on the Lehman audit team, William Schlich, told the bankruptcy examiner that E&Y did not have a "hard and fast rule defining materiality in the balance sheet context" (Valukas 2010, Volume 3, p. 890). This assertion is consistent with the independent auditor's professional standards, as promulgated by the Auditing Standards Board (ASB) and the Public Company Accounting Oversight Board (PCAOB), which generally avoid providing auditors specific quantitative benchmarks for materiality. Professional standards state that the "auditor's consideration of materiality is a matter of professional judgment and is influenced by his or her perception of the needs of a reasonable person who will rely on the financial statements" (AU §312.10, AICPA 2009). The importance of considering the user's perspective in determining what is material is underscored in the auditor's professional literature: "In all instances, the element or elements selected should reflect, in the auditor's judgment, the measures most likely to be considered important by the financial statement users" (AU §9312.11, AICPA 2009). Also, qualitative factors should include the potential effect of the misstatement on trends, and the potential effect on the entity's compliance with regulatory provisions (AU §9312.17, AICPA 2009).

Professional standards on materiality appear consistent with the prevailing view by the courts. In 2011, in *Matrixx Initiatives, Inc. v. Siracusano*, 131 S. Ct. 1309, the U.S. Supreme Court reaffirmed its commitment to a "reasonable person" standard in the assessment of materiality in the context of financial reporting and disclosure. Matrixx, a pharmaceutical company, argued unsuccessfully that evidence of adverse side effects caused by its cold remedy medication was immaterial by virtue of the fact that the evidence failed to meet tests of statistical significance. The Court characterized Matrixx's argument as an attempt to apply a "bright-line" definition of materiality, and concluded that materiality cannot be reduced to a bright-line rule. The Court reiterated its position from an earlier case that materiality is satisfied when there is a substantial likelihood that the disclosure of the omitted fact would have been viewed by a reasonable investor as significantly altering the "total mix" of information available.

In his Senate testimony, the Lehman bankruptcy examiner said that "existing rules require analyses of *qualitative* materiality—particularly when management is trying to actively manage the financial statements—and not just number-crunching, to determine if an issue is material" (Valukas 2011, 13) (emphasis in the original). Valukas recommended that these rules need to be tightened or enforced more aggressively, and that auditors must avoid the mindset of finding a way to describe an issue as immaterial.

SUBSTANCE OVER FORM

According to professional standards, the objective of the independent auditor's report "is the expression of an opinion on the fairness with which [the financial statements] present, in all material respects, financial position, results of operations, and its cash flows in conformity with generally accepted accounting principles" (AU §110.01, AICPA 2009). Generally accepted accounting principles provide auditors a common, uniform framework with which to judge the "fairness" of the audit client's financial statement presentation. Auditing standards adopted by the Public Company Accounting Oversight Board for public company audits state that the auditor's judgment should be based on whether, among other considerations, (1) the accounting principles selected and applied have general acceptance, (2) the accounting principles are appropriate in the circumstances, and (3) the financial statements, including the related notes, are informative of matters that may affect their use, understanding, and interpretation (AU §411.04, AICPA 2009). Auditing standards also state: "generally accepted accounting principles recognize the importance of reporting transactions and events in accordance with their substance. The auditor should consider whether the substance of transactions or events differs materially from their form" (AU §411.06, AICPA 2009).

Lehman personnel believed that by late 2007, none of Lehman's peer investment banks were applying the same accounting treatment to Repo 105-type transactions (Valukas 2010, Volume 3, p. 739). Further, Lehman used a London law firm for the opinion letter supporting Lehman's Repo 105 accounting, and conducted its Repo 105 activity out of England. Finally, according to Lehman's former Global Financial Controller, a careful review of Lehman's 10-K and 10-Q filings would not reveal Lehman's use of Repo 105 transactions (Valukas 2010, Volume 3, pp. 734–735).

The lawsuit that the New York Attorney General filed against E&Y in December 2010 stresses the role of substance over form in financial reporting, and also the auditor's responsibilities in connection with financial statement audits. The lawsuit is premised on E&Y's implicit approval of Lehman's accounting for Repo 105 transactions. It alleges that E&Y failed to meet Generally Accepted Auditing Standards in their audits of Lehman's financial statements because:

- E&Y failed to treat Repo 105 transactions as sufficiently unusual to warrant informing Lehman's audit committee.
- E&Y failed to conduct a *bona fide* investigation of Lehman's accounting for Repo 105 transactions, even though it was aware, or should have been aware, that Lehman's intended use of its Repo 105 accounting policies was to manage balance sheet metrics without changing the economic substance of the underlying repurchase agreements.
- E&Y did not object when Lehman's management made false and misleading assertions regarding Lehman's liquidity position in press releases, earnings calls, and in management's discussion and analysis (MD&A) in Lehman's Form 10-K and Form 10-Q filings from 2001 through 2008.

THE WHISTLEBLOWER

In May 2008, Matthew Lee, a Senior Vice President in Lehman's Finance Division, submitted a letter to senior Lehman management in which he alleged various financial reporting practices that potentially violated Lehman's own code of ethics (Valukas 2010, Volume 3, p. 956). Section 301 of the Sarbanes-Oxley Act requires audit committees to establish procedures for the receipt, retention, and treatment of complaints received by the company regarding accounting, internal accounting controls, or auditing matters. Consequently, Lehman's audit committee identified and treated Lee as a whistleblower. The audit committee instructed Lehman's internal audit group and external auditors to investigate Lee's concerns.

Lee's letter contained six allegations, but did not refer to Lehman's Repo 105 activity. On June 12, E&Y's engagement partner and another member of the audit team interviewed Lee. The auditor's notes of the interview indicate that Lee verbally informed E&Y that Lehman had used Repo 105 transactions to remove $50 billion of inventory from its balance sheet for the quarter just ended (the second quarter, ending May 31), and returned the inventory to its balance sheet approximately one week later (Valukas 2010, Volume 3, p. 957). Lee could not have included this specific allegation in his letter, because his letter preceded the quarter-end. However, the Repo 105 activity had been almost as high at the end of the prior quarter, and Lee could have, but chose not to, include that matter in his letter.

On the day following this interview, E&Y met with Lehman's audit committee, but did not inform the committee of Lee's allegations regarding the Repo 105 activity, even though the chairman of the audit committee specifically instructed that every allegation by Lee, whether contained in his letter or not, should be investigated (Valukas 2010, Volume 3, p. 959), and even though Section 301 of the Sarbanes-Oxley Act imposes a general requirement that the external auditors report directly to the audit committee. Also, E&Y did not discuss Lee's allegation about the Repo 105 activity with Lehman's internal audit director, nor did E&Y discuss the Repo 105 activity with the audit committee when the auditors met with the committee in July to review Lehman's second-quarter results. In his Senate testimony, the bankruptcy examiner commented that "Auditors must take seriously and fully analyze allegations of financial impropriety" (Valukas 2011, 13). Valukas went on to comment that auditors "face intense pressures to conclude their analyses quickly in order to allow financial statements to be released on time but have an important responsibility to follow the facts wherever they may lead" (Valukas 2011, 13).

CASE REQUIREMENTS

1. Broadly speaking, there are two business models for investment banks: the underwriter/brokerage model and the investment model. The underlying risks of these two models differ, and these differences arise from different economic conditions. Briefly describe these two models, and identify the source of risk in each of them.
2. "The more highly leveraged a company is, the more important it is for the company to act quickly when market conditions turn against it." Do you agree with this statement? Include a basic description of the relationship between leverage and risk in explaining your answer.
3. Compare and contrast the accounting for ordinary repurchase agreement transactions and Repo 105 transactions. Identify the effect, if any, of Repo 105 treatment (the net effect of both the repurchase agreement itself and the use of the proceeds) on:

   (a) the income statement,
   (b) the cash flow statement, and
   (c) the balance sheet.

   Using the data provided in Table 1, recalculate Lehman's leverage ratios backing out the Repo 105 transactions. How would you expect financial statement users to react to your findings?

4. Review the financial data and ratios presented in Exhibit 1 for Lehman, three other financial institutions, and three other prominent companies. Analyze trends at Lehman over time. Compare Lehman to the other financial institutions. Compare the financial institutions as a group to the leading firms in other industries.

EXHIBIT 1

Comparative Financial Data: 2002–2007

Panel A: Financial Data for Lehman and Comparison Financial Institutions

	2002	2003	2004	2005	2006	2007
Lehman Brothers (all amounts in billions of dollars)						
Revenue	16.8	17.3	21.3	32.4	46.7	59.0
Income	1.0	1.7	2.4	3.3	4.0	4.2
Assets	260.3	312.1	357.2	410.1	503.5	691.1
Equity	8.9	13.2	14.9	16.8	19.2	22.5
Goldman Sachs & Co. (all amounts in billions of dollars)						
Revenue	22.9	23.6	29.8	43.4	69.4	88.0
Income	2.1	3.0	4.6	5.6	9.4	11.4
Assets	355.6	403.8	531.4	706.8	838.2	1,119.8
Equity	19.0	21.6	25.1	28.0	35.8	42.8
Bear Stearns & Co. (all amounts in billions of dollars)						
Revenue	6.9	7.4	8.4	11.6	16.6	16.2
Income	0.8	1.1	1.3	1.4	2.0	0.0
Assets	184.9	212.2	256.0	292.6	350.4	395.4
Equity	6.4	7.5	9.0	10.8	12.1	11.8
AIG (American International Group) (all amounts in billions of dollars)						
Revenue	67.5	79.4	97.7	108.8	113.4	110.1
Income	5.5	9.3	9.8	10.5	14.0	6.2
Assets	561.2	678.3	801.1	853.1	979.4	1,060.5
Equity	59.1	71.3	79.7	86.3	101.7	95.8

Panel B: Financial Data for Selected Companies from Other Industries

	2002	2003	2004	2005	2006	2007
Microsoft (all amounts in billions of dollars)						
Revenue	28.4	32.2	36.8	39.8	44.3	51.1
Income	7.8	7.5	8.2	12.3	12.6	14.1
Assets	67.6	81.7	94.4	70.8	69.6	63.2
Equity	52.2	64.9	74.8	48.1	40.1	31.1
Pfizer (all amounts in billions of dollars)						
Revenue	32.3	44.7	52.5	47.4	48.4	48.4
Income	9.1	3.9	11.4	8.1	19.3	8.1
Assets	46.4	116.8	123.7	117.6	115.5	115.3
Equity	20.0	65.4	68.3	65.6	71.4	65.0
ExxonMobil (all amounts in billions of dollars)						
Revenue	204.5	246.7	298.0	370.7	377.6	404.6
Income	11.5	21.5	25.3	36.1	39.5	40.6
Assets	152.6	174.3	195.3	208.3	219.0	242.1
Equity	74.6	89.9	101.8	111.2	113.8	121.8

(continued on next page)

EXHIBIT 1 (continued)

Panel C: Financial Ratios for Lehman and Comparison Companies

	2002	2003	2004	2005	2006	2007
Asset Turnover						
Lehman	0.065	0.055	0.060	0.079	0.093	0.085
Goldman	0.064	0.058	0.056	0.061	0.083	0.079
Bear Stearns	0.037	0.035	0.033	0.040	0.047	0.041
AIG	0.120	0.117	0.122	0.128	0.116	0.104
Microsoft	0.420	0.394	0.390	0.562	0.636	0.809
Pfizer	0.696	0.383	0.424	0.403	0.419	0.420
ExxonMobil	1.34	1.42	1.53	1.78	1.72	1.67
Assets to Equity						
Lehman	29.3	23.6	24.0	24.4	26.2	30.7
Goldman	18.7	18.7	21.2	25.2	23.4	26.2
Bear Stearns	28.9	28.3	28.4	27.1	29.0	33.5
AIG	9.5	9.5	10.1	9.9	9.6	11.1
Microsoft	1.3	1.3	1.3	1.5	1.7	2.0
Pfizer	2.3	1.8	1.8	1.8	1.6	1.8
ExxonMobil	2.0	1.9	1.9	1.9	1.9	2.0
Return on Assets						
Lehman	0.4%	0.5%	0.7%	0.8%	0.8%	0.6%
Goldman	0.6%	0.7%	0.9%	0.8%	1.1%	1.0%
Bear Stearns	0.4%	0.5%	0.5%	0.5%	0.6%	0.0%
AIG	1.0%	1.4%	1.2%	1.2%	1.4%	0.6%
Microsoft	11.5%	9.2%	8.7%	17.4%	18.1%	22.3%
Pfizer	19.6%	3.3%	9.2%	6.9%	16.7%	7.0%
ExxonMobil	7.5%	12.3%	13.0%	17.3%	18.0%	16.8%
Return on Equity						
Lehman	11.2%	12.9%	16.1%	19.6%	20.8%	18.7%
Goldman	11.1%	13.9%	18.3%	20.0%	26.3%	26.7%
Bear Stearns	12.5%	14.7%	14.4%	13.0%	16.5%	0.0%
AIG	9.3%	13.0%	12.3%	12.2%	13.8%	6.5%
Microsoft	14.9%	11.6%	11.0%	25.6%	31.4%	45.3%
Pfizer	45.5%	6.0%	16.7%	12.3%	27.0%	12.5%
ExxonMobil	15.4%	23.9%	24.9%	32.5%	34.7%	33.3%

5. Do Repo 105 transactions satisfy the conditions of SFAS No. 140 for treatment as a sale? Is there a difference in the economic substance between ordinary repo transactions and Repo 105 transactions? Explain.
6. U.S. GAAP is generally characterized as rules-based. There may be situations where technical compliance with rules-based standards still leads to the mischaracterization of business transactions or the omission of significant information.

   (a) In your opinion, are such mischaracterizations unethical or illegal? Should the Securities and Exchange Commission (SEC) or other regulatory bodies pursue enforcement actions in such cases?
   (b) In contrast to U.S. GAAP, International Financial Reporting Standards (IFRS) is generally characterized as principles-based. Do you think that principles-based

standards or rules-based standards are more effective at preventing managers from issuing misleading financial statements?

7. In light of information that has become available following the 2008–2009 crisis in the financial sector, it appears that some companies in the financial sector understated their "true" indebtedness to obfuscate their financial position. That is, their end-of-period debt (as reported in the financial statements) was much less than their carrying debt throughout the reporting period. To prevent such behavior, should additional disclosures (such as average daily debt or maximum debt for the period) be mandated? Discuss the cost-benefit trade-off of such requirements.
8. Lehman's senior management, internal auditors, and external auditors were alerted to the use of Repo 105 transactions by a whistleblower. The resulting investigation does not appear to have led to a serious reconsideration of the appropriateness of Lehman's accounting for these transactions. What corporate governance measures can be instituted to help prevent the issuance of misleading financial statements?
9. While the use of Repo 105 transactions was relatively minor when Lehman's policy for accounting for these transactions was adopted in 2001, the volume of Repo 105 activity increased dramatically in 2007 and 2008, when Lehman's assets became increasingly illiquid. Should this change in volume have impacted E&Y's audit procedures and assessment of audit risk? Why?
10. Is E&Y's responsibility in connection with its audit of Lehman limited to verification of amounts in the financial statements, or does it extend to footnote disclosure? Does the auditor's responsibility extend to the Management Discussion & Analysis (MD&A) section of the company's Form 10-K and Form 10-Q filings with the SEC? Does the auditor's responsibility extend to management assertions made in press releases and in the "earnings calls," which the auditors routinely observe?
11. As noted in the New York Attorney General's Complaint against E&Y (paragraphs 43–44, p. 19), an E&Y auditor asked his senior manager about the potential impact that Lehman's Repo 105 activity could have on its reputational risk. The auditor asked whether the audit team was comparing Lehman's Repo 105 activity to Lehman's competitors, or referring to any industry publications or regulatory guidance. The auditor's concerns stemmed from E&Y's "balanced audit approach," which requires E&Y to obtain some level of understanding of the business and the industry of its audit client. Why should industry practices and competitors' actions affect audit procedures and auditor judgments?

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CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE

This case enables students to gain a better understanding of financial reporting through a real-world example. The case encompasses various elements of the financial reporting process, including the roles played by management, the audit committee, and the external auditor in making, approving, and attesting to the choice of an accounting method, and the impact of that choice on the financial statements and on various financial statement users. The case questions require students to consider a wide range of topics that include assessment of the company's business model and related business risk, the relationship between leverage and risk, the application of complex accounting rules to a specific situation, rules-based versus principles-based accounting standards, corporate governance over financial reporting, and auditors' responsibilities for management's representations in the financial statements, footnote disclosures, and elsewhere.

In order to successfully complete the case, students must have a solid grasp of basic accounting knowledge and the relationships among the various components of the financial statements, and also an understanding of leverage ratios and their usage. The case also requires accounting research skills, as well as written communication skills. We believe the case is most appropriate for students who have completed or are currently enrolled in Financial Accounting Intermediate II.

Learning Objectives

Specific learning objectives are as follows.

LO 1: Students will demonstrate an understanding of how business strategy affects risk, and the relationship between leverage and risk.

LO 2: Students will analyze financial ratios to compare and contrast profitability and risk (1) among companies in the financial services sector, and (2) between financial services firms and firms in other industries.

LO 3: Students will determine the relevant provisions of a complex and technical accounting standard, critically examine the appropriateness of a company's financial accounting choice, and assess the impact of that choice on measures of profitability and risk.

LO 4: Students will evaluate the implications of the choice between rules-based and principles-based accounting standards, with respect to technical compliance with those standards and with respect to fair financial reporting.

LO 5: Students will relate the role of corporate governance mechanisms and business ethics to the financial reporting process.

LO 6: Students will analyze the cost/benefit trade-off of additional regulation in the financial services sector.

LO 7: Students will gain an appreciation of the regulatory environment in which the accounting and auditing profession functions.

LO 8: Students will gain an appreciation of the professional and ethical responsibilities of accountants and the importance of ethics to the practice of accounting.

LO 9: Students will gain experience writing about complex and controversial accounting issues, and engaging in an informed discussion about these issues.

Table 2 maps from each learning objective to the case questions that apply to that objective, and to the relevant American Institute of Certified Public Accountants Core Competencies (AICPA 2003) (available on the AICPA website).

TABLE 2

Mapping of Learning Objectives

Learning Objective	Case Question	AICPA Core Competency
LO 1	#1, #2	Functional: Risk Analysis
LO 2	#4	Personal: Problem Solving and Decision Making Broad Business: Industry/Sector Perspective
LO 3	#3, #5	Personal: Problem Solving and Decision Making Functional: Measurement and Research Broad Business: Strategic/Critical Thinking
LO 4	#6b	Personal: Problem Solving and Decision Making Functional: Decision Modeling Broad Business: International/Global Perspective
LO 5	#8	Personal: Professional Demeanor, Problem Solving, and Decision Making Functional: Decision Modeling, Risk Analysis Broad Business: Strategic/Critical Thinking
LO 6	#7	Broad Business: Legal/Regulatory Perspective, Strategic/ Critical Thinking
LO 7	#6a, #8, #10	Broad Business: Legal/Regulatory Perspective
LO 8	#9, #10, #11	Personal: Professional Demeanor, Problem Solving, and Decision Making Broad Business: Industry/Sector Perspective
LO 9	#5, #6, #7, #8, #9, #11, and the classroom discussion of the case	Personal: Communication and Interaction Functional: Reporting

Implementation Guidance

The case requirements have been structured so as to facilitate its use in a variety of courses. The first three questions are basic to Lehman's business strategy and financial condition, and should be covered irrespective of the specific course. Questions 4 through 7 emphasize financial ratios, accounting standards, and financial reporting and are, thus, most appropriate for courses in financial accounting and financial statement analysis. The case can be taught in auditing courses by emphasizing the issues of substance versus form with respect to the Repo 105 transactions, whether the aggregate Repo 105 activity had a material effect on Lehman's balance sheet, and whether the auditors responded appropriately to the whistleblower's allegations. Questions 6 and 8 through 11 address these auditing and governance issues, and several of these questions can also be used to focus on ethical issues in accounting and auditing. Table 3 identifies the questions and learning objectives that instructors might find most appropriate for courses in financial accounting, financial statement analysis, and auditing.

The case was field-tested by two instructors at a large public university and a small private liberal arts college, in three courses: (1) Financial Statement Analysis, with 42 graduate accounting students, (2) Auditing, with 76 undergraduate students, and (3) Intermediate Accounting I, with 11 undergraduate business students. All three groups of students found the material relevant and interesting. Most students in the auditing course were currently enrolled in (and nearing completion of) Intermediate Accounting II, and a significant minority of these auditing students had already completed this course.

TABLE 3

Suggested Use of Questions and Objectives by Course

	Financial Statement Analysis	Financial Accounting	Auditing
Question 1	X	X	X
Question 2	X	X	X
Question 3	X	X	X
Question 4	X		
Question 5	X	X	X
Question 6	X	X	Part (a)
Question 7	X		
Question 8			X
Question 9			X
Question 10			X
Question 11			X
Learning Objectives	1, 2, 3, 4, 6, 9	1, 3, 4, 9	1, 3, 5, 7, 8, 9

Both instructors allowed students to self-select into teams of two to four. A small number of students in all three classes elected to complete the case individually. Based on informal feedback from students, we believe that the case can be completed in four to eight hours, and that it is manageable as an individual assignment. The classroom discussion of the case requires between 80 minutes and two hours. The liveliest discussions were on the questions of whether Lehman was in technical compliance with SFAS No. 140, whether the external auditors failed to fulfill their professional responsibilities, whether the financial statements were materially misstated, and on the relative merits of rules-based versus principles-based accounting standards.

In all three courses, the instructors spent from 30 to 80 minutes on introductory material relevant to the case. In the intermediate accounting class, the instructor spent a full class session comparing the financial statement impact of factoring receivables versus using those receivables as collateral for a loan, which introduced students to the key provisions of SFAS No. 140. In the financial statement analysis class, students watched a 30-minute video of an SEC Open Meeting (held September 17, 2010), at which the Division of Corporate Finance presented proposals for additional disclosures by filers about their short-term borrowings.[6] The auditing students viewed video clips of testimony by the bankruptcy examiner, Lehman's CEO, and other witnesses, provided in a U.S. Senate subcommittee hearing on the accounting profession, and in a hearing of the Financial Crisis Inquiry Commission (FCIC).[7]

Both instructors concur that a first-time adopter of the case would require eight to ten hours to prepare the case. This estimate includes approximately five hours to become familiar with relevant provisions of the bankruptcy examiner's report.

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[6] Available at: http://www.sec.gov/news/openmeetings/2010/agenda091710.htm Although the proposals discussed at the meeting were largely motivated by the events at Lehman, the company was not mentioned by name. One of the Commissioners makes a brief reference to Repo 105 transactions.

[7] The Senate hearing can be accessed from the website of the United States Senate Committee on Banking, Housing, and Urban Affairs at: http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=0f533e5b-dc43-4fc2-a415-5df2ae8806da The prepared remarks of Anton Valukas, the bankruptcy examiner, begin 82:50 minutes into the video. The FCIC hearing can be accessed at http://fcic.law.stanford.edu/videos/view/51 The title of the hearing is "Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and the role of Systematic Risk in the Financial Crisis: Session 2: Lehman Brothers." The prepared remarks of Lehman CEO Richard Fuld begin 13:10 minutes into the video.

Student Feedback

In all three classes, students submitted a written case solution that comprised between 5 and 8 percent of their course grade. Student feedback presented in the following paragraphs was collected through four means: three formal and one informal. A pre-case anonymous questionnaire was administered asking students to indicate their perceptions on various accounting and corporate governance issues using a seven-point Likert scale. While students were working on the case, the instructors were available for help and made informal assessments on workload issues, as well as gauged the relative difficulty of various components of the case. At the conclusion of the case, a post-case anonymous questionnaire was administered that repeated the questions from the first questionnaire to assess how student perceptions and views were affected by the case. Additionally, an anonymous case evaluation survey was administered at the conclusion of the case. The survey included questions to which students were asked to respond using a seven-point Likert scale, and two open-ended questions asking students what they liked about the case and suggestions for improvement.

A summary of student perceptions is presented in Table 4. The pre-case questionnaire gauged students' perceptions of managers' motivation and ability to manipulate various financial statements (Panel A), the auditor's role and the role of GAAP in preventing manipulation (Panel B), and the relative importance of various financial statement users to the manager (Panel C). The post-case questionnaire assessed the same perceptions after the case was discussed. Table 4 presents the results of the post-case questionnaire, along with the differences between students' pre-case and post-case responses.

After exposure to the Lehman case, students believed more strongly in managers' motivation and ability to manipulate various elements of the financial statements. Also after exposure to the case, students were less confident that GAAP ensures fair financial reporting, and are more likely to believe that auditors knowingly permit their clients to window-dress the financial statements than that auditors are misled. Finally, regarding managers' assessment of the relative importance of equity investors, creditors, and regulators, both undergraduate students and graduate students increased the importance of the role of creditors following exposure to the case (and the change was statistically significant for the undergraduate students).

The overall student response to the case was favorable. The mean responses for all of the learning objective questions were above five on a seven-point scale. The averages for whether the case was interesting and whether it was a positive learning experience were 6.33 and 6.56, respectively, for graduate students, and 6.14 and 6.29 for the undergraduate students. The data are summarized in Table 5.

Students particularly liked the relevance and timeliness of the case as it relates to the financial crisis, with 46 students alluding to it in their responses to the open-ended questions. Moreover, another 26 responses liked the opportunity to learn more about Lehman. There was also positive feedback on the presentation of the case material and the questions. Thirty of the responses explicitly commented that they liked the "succinctness," "clarity," and "amount of information" in the case, and another 11 responses commented favorably on the case questions. When asked for suggestions for improvement, 33 students (mostly undergraduates) addressed some aspect of the workload. These suggestions included more direction on where to find answers to the case questions, more time to complete the case, fewer and less open-ended case questions, and less reading of source materials. We believe these workload concerns can be addressed by allocating more of the course grade to the case (recall that in our classes, the case constituted only 5 to 8 percent of the course grade). Finally, students viewed the discussion/debate of the case favorably. According to one student in the graduate class, "the discussion following the case was phenomenal; the *entire class* having an intelligent conversation is rare."

TABLE 4

Student Perceptions of Financial Reporting Issues

Panel A: Student Perception of Managers' Incentives and Abilities to Manipulate the Financial Statements[a]

Question	Graduate (n = 42)		Undergraduate (n = 87)	
	Post-Case	Change (Post-Case Minus Pre-Case)	Post-Case	Change (Post-Case Minus Pre-Case)
With regard to quarterly and annual financial reports issued by public companies, corporate managers:				
Likert Scale: 1 = Never, 2 = Rarely, 4 = Sometimes, 6 = often, 7 = always				
are motivated to manipulate the income statement to provide financial statement users a better-than-true representation of the financial prospects of their company	5.30	0.64*	4.66	0.92*
have the ability to manipulate the income statement to provide financial statement users a better-than-true representation of the financial prospects of their company	5.30	0.42	4.73	0.23
are motivated to manipulate the balance sheet to provide financial statement users a better-than-true representation of the financial prospects of their company	5.25	0.71*	4.79	1.00*
have the ability to manipulate the balance sheet to provide financial statement users a better-than-true representation of the financial prospects of their company	5.48	0.74*	5.06	0.70*
are motivated to manipulate the statement of cash flows to provide financial statement users a better-than-true representation of the financial prospects of their company	4.75	0.77*	4.12	0.34
have the ability to manipulate the statement of cash flows to provide financial statement users a better-than-true representation of the financial prospects of their company	4.73	0.36	4.01	−0.01

(continued on next page)

TABLE 4 (continued)

Panel B: Student Perception of the Leeway Provided to Managers by Auditors and GAAP

	Graduate (n = 42)		Undergraduate (n = 87)	
Question	**Post-Case**	**Change (Post-Case Minus Pre-Case)**	**Post-Case**	**Change (Post-Case Minus Pre-Case)**
To the extent that senior managers of public companies successfully convey a better-than-true representation of the financial prospects of their company in their quarterly and annual financial statements, how often do you think the company's auditors are misled versus how often do they knowingly permit their client management's reporting choices?	3.75	0.37	4.24	0.90*
Likert Scale: 1 = auditors are misled ... 7 = auditors knowingly permit client's reporting choice.				
Please indicate the extent to which you agree with the following statement: "If a company strictly complies with GAAP as set forth in the professional standards issued by the FASB, the company will not be able to provide financial statement users a better-than-true representation of its financial prospects."	2.73	−0.91*	3.71	−0.59*
Likert Scale: 1 = I disagree with this statement ... 7 = I agree with this statement				

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TABLE 4 (continued)

Panel C: Student Perception of the Relevant Financial Statement Users

Question	Graduate (n = 42)		Undergraduate (n = 87)	
	Post-Case	Change (Post-Case Minus Pre-Case)	Post-Case	Change (Post-Case Minus Pre-Case)
With regard to quarterly and annual financial reports issued by public companies, to the extent that managers are motivated to manipulate the financial statements to provide users a better-than-true representation of the financial prospects of the company, to what extent is the manager concerned with each of the following type of user:				
Likert Scale: 1 = not at all concerned . . . 7 = very concerned				
Equity investors (stockholders)	6.21	0.78*	5.84	−0.08
Creditors (such as banks and bondholders)	5.90	0.60	5.81	0.44*
Regulators	4.90	0.37	5.16	0.21

* Indicates a statistically significant difference in means using a t-statistic of 5 percent.

[a] Panels A, B, and C show mean student responses to the post-case questionnaire, and also the difference between the means in the pre- and post-case responses. (The mean pre-case response can be derived by subtracting the amount in the change column from the mean post-case response.) The number of students reflects the number of surveys completed, not the number of responses for each question, because some students left some questions blank.

TABLE 5
Summary of Student Evaluation of the Case

Question	Graduate Mean (n = 42)	Undergraduate Mean (n = 87)
Likert Scale for all questions: 1 = disagree, 4 = neutral, 7 = agree		
As a result of this case, I have a better understanding of the motives that managers may have to present a better-than-true representation of the financial prospects of their company.	5.95	5.85
As a result of this case, I have a better understanding of the means by which managers may present a better-than-true representation of the financial prospects of their company.	6.21	6.00
As a result of this case, I have a better understanding of the recent financial crisis.	5.83	5.86
As a result of this case, I have a better understanding of the regulation of financial reporting by public companies.	5.25	5.67
I found this case interesting.	6.33	6.14
This case was a positive learning experience.	6.56	6.29

TEACHING NOTES

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