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DUE DILIGENCE AND FINANCIAL STATEMENT ANALYSIS: KEY FACTORS IN MERGERS AND ACQUISITIONS - LESSONS FROM BANK OF AMERICA'S ACQUISITION OF MERRILL LYNCH

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Article Info

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Abstract

This case study analyzes the Bank of America's acquisition of Merrill Lynch in 2008 and the issues that arose due to insufficient due diligence and financial statement analysis. The acquisition led to huge losses for the bank, resulting in a government bailout of $20 billion. The document discusses the events leading up to the acquisition, the post-acquisition issues and the examination of Merrill Lynch's accounting policies and valuation issues. The case provides an opportunity for students to apply acquisition principles in a practical context, evaluate the advantages and disadvantages of the acquisition, and learn the importance of thorough financial statement analysis and due diligence in merger and acquisition decision-making processes. The document also includes a table of US banks and their tangible book/asset ratios, highlighting the potential risks involved in mergers and acquisitions.

INTRODUCTION

On January 16, 2009, in an earnings release, Bank of America revealed massive losses for the 4th quarter of 2008 at Merrill Lynch. This action was the impetus for an emergency government bailout of $20 billion to keep the bank solvent. The large loss for the 4th quarter at Merrill Lynch was due to an operating loss of $21.5 billion primarily in its sales and trading operation. Bank of American also disclosed it tried to abandon the acquisition with Merrill Lynch when they discovered the extent of the trading losses in December. However, they were required to complete the acquisition by the U.S. government. Upon the release of the earnings announcement and the Merrill situation, Bank of America's stock fell to $7.18, its lowest level in 17 years. Surprisingly, Bank of America's capitalization, including Merrill Lynch, fell dramatically after the acquisition. It dropped from $108 billion prior to the acquisition to about $45 billion. This was dramatic given they had offered about $50 billion for Merrill four months earlier.

The events leading up to this problem are open for interpretation, but even Bank of America seemed to have overestimated the value of Merrill Lynch. Both insiders and outsiders are led to ask "How did it happen? Did Bank of America really know what it was buying? Was it a screaming buy?" On two issues there arises a question regarding whether the relevant accounting policies and valuation issues received the appropriate scrutiny. In other

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words, should Ken Lewis, Chief Executive of Bank of America, have employed an auditor to examine the books or records of Merrill Lynch in order to detect any hidden liabilities or defects in the operations of Merrill Lynch before agreeing to the acquisition? An internal evaluation, either by the internal risk assessment group, the internal auditors, or external auditors might have raised a red flag.

Secondly, the issue that has led to questions of the adequacy of the acquisition process is whether Ken Lewis was following appropriate protocol in making the decision to acquire Merrill Lynch.

Bank of America

Bank of America Corporation is a major player in the banking world and has a headquarters in Charlotte, North Carolina. It was deemed the largest financial services company in the world and led as one of the top three largest banks in the United States depending upon the measure used. The company provided unmatched convenience in the United States, serving more than 59 million consumer and small business relationships with more than 6,100 retail banking offices, more than 18,000 ATMs and award-winning online banking with more than 25 million active users. On a global basis, clients were spread across more than 150 countries. Bank of America was serving 99 percent of the U.S. Fortune 500 companies and 83 percent of the Fortune Global 500.

BankAmerica Corporation started via owning Bank of America and its subsidiaries. Through expansion, BankAmerica expanded outside and grew through strategic acquisitions. However, these acquisitions came with some problems. These problems included the acquisitions being near insolvency due to poor loan management. In 1986 and 1987, BankAmerica incurred very significant losses due to bad loans to global clients, many in Latin America. The company fired its CEO, Sam Armacost. Armacost blamed the his predecessor, A.W. (Tom) Clausen for poor management, but Clausen was appointed to replace Armacost. In 1997, BankAmerica merged with NationsBank and renamed it to Bank of America Corporation.

Merrill Lynch

Merrill Lynch, headquartered in New York, was founded in 1914, with the basic philosophy that everyone should invest in the financial markets. It was an international financial conglomerate which, through its many subsidiaries, offered financial and investment services for private, institutional, and government clients around the world. Its chief divisions were conventional banking, investment banking, wealth management, asset management, and insurance. Those positions made Merrill Lynch not only one of the pillars of Wall Street, but they built a reputation as the stockbroker for Main Street, as well. Merrill's logo - a bull - had long symbolized the fundamental optimism of Wall Street, and its leaders had often been viewed as leaders for the entire industry. In recent years, Merrill Lynch had grown to be two companies. One was a thriving wealth-management company with $1.4 trillion of assets managed by the firm's army of 16,690 brokers plus a 49 percent ownership in BlackRock, a fast-growing asset management operation. The other was a fixed-income or bond-trading operation that invested heavily in relatively high-risk, high-return securities backed by subprime home mortgages. Merrill Lynch survived wars and the Great Depression, but succumbed as an independent company to the mortgage meltdown that began in mid-2007

Pre-Acquisition

On Sept. 14, 2008, Merrill Lynch announced that it had agreed to be purchased by Bank of America, rather than run the risk of being pulled under by turmoil surrounding the industry, as Bear Stearns and Lehman Brothers had been. The following day, Bank of America offered $50 billion in stock, or $29 a share, for the company. The acquisition combined Bank of America's banking and lending strength with Merrill Lynch's wealth-management expertise. Mr. Lewis called Merrill's 16,690 financial brokers "the crown jewel of the company." When Mr. Lewis was asked about Bank of America’s due diligence on the acquisition, given that it was negotiated within 48 hours, Joe Price, the CFO of Bank of America, replied with lavish assurances saying that the Bank has had a tremendous amount of historical knowledge, both as a competitor with Merrill Lynch, but also reviewed and analyzed the company over the years.

Over the years, leadership at Bank of American swayed between focusing on financial discipline and efficiency versus significant growth through acquisitions and mergers. In 2004, Bank of America purchased Boston-based

FleetBoston Financial for $47 billion in cash and equity. This was a significant merger since FleetBoston was the seventh largest bank in United States. It had about $197 billion in assets, more than 20 million customers with revenue of $12 billion. In 2005, Bank of America purchased MBNA for $35 billion in cash and stock. This provided them with a leading credit card issuer at home and abroad. This increased the credit card side of Bank of America to more than 40 million U.S. customers and almost $140 billion in credit card balances.

In late October 2007, Merrill Lynch placed a write-down of $8.4 billion to recognize the decline in value of securities as housing prices had fallen and the number of foreclosures had grown. Shortly thereafter, as a result of the losses and an unauthorized merger proposal, E. Stanley O'Neal was removed as chief executive at Merrill Lynch. On Nov. 14, 2007, John A. Thain, the chief executive of the New York Stock Exchange and a former president of Goldman Sachs, was named as Mr. O'Neal's successor. Mr. Thain moved quickly to write off billions of soured investments while raising more capital. In July 2008, he sold $31 billion of securities for pennies on the dollar, asserting that Merrill Lynch needed to get the housing crisis behind it. Mr. Thain's actions were the most drastic of any of the Chiefs major Wall Street banks. As recently as Sept. 10, 2008, he reassured worried employees that the firm's capital levels were sound. But as Lehman Brothers started to swirl downward toward bankruptcy it became obvious that far more drastic action was needed.

Mr. Lewis has had a history of making bold acquisitions, including most recently, Countrywide, the troubled mortgage lender. Countrywide was expected to add value to Bank of America. Bank of America's strategy had been to focus on consumers. By creating the nation's largest retail bank, its revenues and assets respectively increased by around 6 percent and by about 25 percent between 2006 and 2008. That growth bestowed it the currency to pursue an investment bank and provided an opportunity to develop other banking business through the acquisition of Merrill Lynch. "Although Merrill Lynch had a high amount of "problem assets" subject to write-downs to capital, from a strategic perspective, Merrill Lynch would provide diversity to Bank of America's revenues stream. This would reduce its dependence on consumer banking," said Mr. Lewis. In addition, while Merrill Lynch's brokers were to be combined with Bank of America's smaller group of wealth brokers into an entity called Merrill Lynch Wealth Management, Mr. Thain was to stay on as president of global banking, securities, and wealth management in the combined company. This structuring was to allow Mr. Thain to essentially retain control of the Merrill part of the businesses.

When Treasury Secretary Henry M. Paulson Jr. called top bankers together on Sept. 12, 2008, for weekend-long talks on saving Lehman, Mr. Thain began discussions with Mr. Lewis. Within two days, they were ready with an announcement that rattled some on Wall Street even more than the news of Lehman's bankruptcy: the end of Merrill as an independent firm. However, controversial opinions exist between proponents and opponents toward to this acquisition.

Winthrop H. Smith Jr., a former Merrill Lynch executive whose father helped build the firm, said the acquisition would represent "……a very sad moment for myself and my family and the thousands of families who worked for Merrill Lynch over our 94-year history, sad to see a firm that always prided itself on its independence absorbed into another." "It's a big gamble," said Alois Pirker, senior analyst at Aite Group, a financial service advisory and research firm. "They could be the number one financial service firm in all areas. But if it doesn't work out, it could go very badly."

On the other hand, analysts considered the deal to be positive move; "The potential of a Bank of America- Merrill Lynch deal is very positive for the market," said Peter Kenny, a managing director at Knight Capital Group-Inc., the Jersey City, New Jersey-based brokerage that handles about $1 trillion of stock transactions a quarter. "It's a stronger balance sheet, and brings more certainty and confidence in the counterparty of trades." **Post-Acquisition**

In January 2009, Bank of America reported a net loss of $2.39 billion, or 48 cents per diluted share. It had earned $215 million, or 5 cents per diluted share, in the fourth quarter of 2007 and concerns about the wisdom of acquiring Merrill Lynch were being raised. This fourth-quarter loss had caused many to question Mr. Lewis' judgment in signing on to the deal. He knew the burden was on him regarding his firm's options, he thought, "It was a tactical mistake for the bank to acquire Merrill Lynch. Why didn't we scrutinize the Merrill's books in more detail?"

Even before the acquisition closed, several red flags arose at Merrill Lynch, relating mostly to controls and procedures used to monitor and record trades. As these discrepancies came to light, some shareholders said Bank of America should have taken a closer look at Merrill Lynch. Undoubtedly, the epicenter of the trouble was Merrill Lynch's markets operation, headed by Thomas K. Montag. According to two insiders familiar with Merrill Lynch's trading strategy, Merrill Lynch traders marked down trades by several hundred million dollars at the end of the fourth quarter, 2008, instruments that had played a crucial role in the financial collapse. Of particular concern, were the activities of a Merrill Lynch currency trader in London, whose trading had come under scrutiny by British regulators. Another Merrill Lynch mortgage trader set off alarms when he broke the bank's rules on substantial purchases for the second time in three months. Due to those facts, Merrill Lynch was forced to struggle managing risk effectively in its trading operation, while some inside traders attempted to breach the rules.

Another issue that arose was the examination for the tangible book/asset ratio of Merrill Lynch during acquisition. Following are some the US Banks and their tangible book/asset ratios. A financial analyst pointed out in January, 2009 that Washington Mutual, which already essentially 'went under' by nature of forced acquisition, had a tangible book/asset ratio of 3.66. And that number was on the higher end of the scale/list. Therefore, would not the thinking be that many of the institutions with ratios lower than that could potentially be in trouble as well? Because, after all, their ratios would be categorically 'worse' than that of an institution that's already had problems. Did Mr. Lewis distinguish that some of the banks listed below had either already failed, been forcibly acquired, or were known to have major problems as the lower the ratio, the more troubled banks they run into?

TABLE 1 THE US BANKS AND THEIR TANGIBLE BOOK/ASSET RATIOS

BB&T (BBT) 6.86	Wells Fargo (WFC) 3.50
PNC (PNC) 5.87	Merrill Lynch (MER) 2.84
Northern Trust (NTRS) 5.51	Bank of America (BAC) 2.83
Goldman Sachs (GS) 4.86	US Bancorp (USB) 2.74
Morgan Stanley (MS) 4.35	Lehman Brothers (LEHMQ.PK) 2.39
JPMorgan (JPM) 3.83	Citigroup (C) 1.52
Washington Mutual (WM) 3.66	

Sources: Company report from Wikimedia Foundation, Inc (www.bankofamerica.com) Date: February 28, 2009.

A final matter was that as restrictions on the activities of commercial banks began loosening some twenty years ago, the desire to grab lucrative investment banking business attracted bank boardrooms. So much so that banking industry executives regularly overlooked the continuing, and potentially fatal, cultural and philosophical differences, as said by Rob Cox, an outside financial analyst. There was a consensus that even if the acquisition had occurred at an easier time in the industry, investors were still wary about the matchup, because the cultures of Bank of America and Merrill Lynch were so vastly different. Therefore, history cautions against a traditional lender acquiring an investment bank. It was perhaps that Bank of America thought it was different this time. However, the investment bankers once again came out on top of the unsurprising surface.

DISCUSSION QUESTIONS

General Business/Strategy Questions

1. What major factors come into play when a company considers an acquisition?
2. What are the PROS and CONS of the acquisition in this case?
3. What is meant by a company's "due diligence"? How will it affect Bank of America's financial evaluation?

Accounting and Financial Analysis Questions

4. Prepare a list of financial ratios which you believe are important for evaluating the solvency of Bank of America.

5. Describe what each ratio you have chosen measures and why you have included it in your list.
6. Prepare a list of ratios that you believe Bank of America should have used in evaluating Merrill Lynch for purchase.
7. Compare and contrast Bank of America's and Merrill Lynch's operating cash flows and accrual earnings. Which do you think give a more accurate depiction of the company? Why?
8. Upon completion of the acquisition and the subsequent decline in the value of the share price of Merrill Lynch, what issues must the accountant consider in regards to the impairment of assets?
9. What is 'goodwill' from an acquisition? How is it recorded, accounted for, and reported?
10. How are the financial ratios calculated in 4 and 6 above impacted by an impairment charge?

TABLE 2 BANK OF AMERICA CORPORATION

Area served	Worldwide
Key people	Kenneth D. Lewis (Chairman, President and CEO) Joe L. Price, CFO
Industry	Banking Financial service Investment service
Products	Finance and insurance Consumer Banking Corporate Banking Investment Banking Investment Management Global Wealth Management Private Equity Mortgage Credit Cards
Employees	171,587 (February 2009)

Sources: Bloomberg; Thomson Reuters
Date: September 22, 2008

TABLE 3 MERRILL LYNCH CORPORATION

Area served	Worldwide
Key people	John Thain (former Chairman and CEO)
Industry	Finance Insurance
Products	Financial Services Investment Banking Investment management
Employees	60,000 (*2008*)

Sources: Company report from Wikimedia Foundation, Inc Date: February 28, 2009.

TABLE 4
BANK OF AMERICA'S FUTURE SOURCES OF REVENUE

	Before Acquisition	After Acquisition
Global Consumer and Small-Business Banking	70%	48%
Global Corporate and Investment Banking	24%	32%

Global Wealth management	6%	20%

Sources: Company report by Jacqueline Doherty from BARRONS' NEWS
Date: September 22, 2008

TABLE 5

ESTIMATED INFORMATION OF THE BANKS ON SEPT 26, 2008

	Bank Of America	**Merrill Lynch**
Recent Price	$37.48	$29.50
52-Week Change	-26.6%	-61.4%
Market Valuation (bil)	$170.9	$45.2
2008 Est.: Revenue (bil)	$79.30	$9.79
Net Income (bil)	$10.84	-$11.42
Earns Per Share	$2.39	-$10.78
Price/Earnings	$15.7	N.A
Loans (bil)	$870.46	$51.60
Brokerage Assets (bil)	$210.7	$1600.0
DebtRating	Aa2/AA-	A2/A
Number of : Brokers	3,300	16,690
Total Employees	206,587	60,000

Sources: Bloomberg; Thomson Reuters; Company reports from BARRONS' NEWS Date: September 26, 2008

TABLE 6 BANK OF AMERICA BALANCE SHEET (MILLIONS OF US DOLLARS)

Assets	**Dec 08**	**Dec 07**	**Dec 06**
Current Asset			
Cash	284,427.0	345,929.0	338,911.0
Total Current Assets	284,428.0	345,929.0	--
Net Fixed Assets	13,161.0	11,240.0	9,255.0
Other noncurrent Assets	1,520,355.0	1,358,586.0	1,111,571.0
Total Assets	1,817,943.0	1,715,746.0	1,459,737.0
Liabilities and Shareholder's Equity	**Dec 08**	**Dec 07**	**Dec 06**
Current Liabilities			
Accounts Payable	36,952.0	53,969.0	42,132.0
Short-Term Debt	364,654.0	412.524.0	358,827.0
Other Current Liabilities	882,997.0	805,177.0	693,497.0
Total Current Liabilities	1,284,603.0	1,271,670.0	--
Long-Term Debt	299,001.0	219,931.0	230,009.0
Other Noncurrent Liabilities	57,287.0	77,342.0	--
Total Liabilities	1,640,891.0	1,568,943.0	1,324,465.0
Shareholder's Equity			
Preferred Stock Equity	37,701.0	4,409.0	2,851.0

Common Stock Equity	139,351.0	142,394.0	132,421.0
Total Equity	177.052.0	146,803.0	135,272.0
Shares Outstanding (mil)	5,017.4	4,437.9	4,458.2

Sources: Company report (www.bankofamerica.com)
Date: January 16, 2009

TABLE 7

BANK OF AMERICA INCOME STATEMENT (MILLIONS OF US DOLLARS)

	Dec 08	**Dec 07**	**Dec 06**
Revenue	124,132.0	124,321.0	117,017.0
Cost of Goods Sold	15,250.0	18,093.0	14,480.0
Gross Profit	108,882.0	106,228.0	102,537.0
Gross Profit Margin	87.7%	85.4%	87.6%
SC&A Expense	76,061.0	47,682.0	38,181.0
Depreciation & Amortization	3,319.0	2,844.0	2,869.0
Operating Income	29,502.0	55,702.0	61,487.0
Operating Margin	23.8%	44.8%	52.5
Nonoperating Expenses	25,074.0	34,778.0	29,514.0
Income Before Taxes	4,428.0	20,924.0	31,973.0
Income Taxes	420.0	5,942.0	10,840.0
Net Income After Taxes	4,008.0	14,982.0	21,133.0

Continuing Operations	4,008.0	14,982.0	21,133.0
Total Operations	4,008.0	14,982.0	21,133.0
Total Net Income	4,008.0	14,982.0	21,133.0
Net Profit Margin	3.2%	12.1%	18.1%
Diluted EPS from Total Net Income	0.55	3.3	4.59
Dividends Per Share	2.24	2.49	2.12

Sources: Company report (www.bankofamerica.com)
Date: January 16, 2009

TABLE 8

BANK OF AMERICA CASH FLOW STATEMENT (MILLIONS OF US DOLLARS)

	Dec 08	**Dec 07**	**Dec 06**
Net Operating Cash Flow	4.034.0	11,036.0	14,509.0
Net Investing Cash Flow	(2,930.0)	(108,480.0)	(68,304)
Net Financing Cash Flow	(10,695.0)	103,412.0	53,133.0
Net Charge in Cash	(9,674.0)	6,102.0	(570.0)
Depreciation & Amortization	3,319.0	2,844.0	2,869.0
Capital Expenditure	(2,098.0)	(2,143.0)	(748.0)
Cash Dividends Paid	(11,528.0)	(10,878.0)	(9,661.0)

Sources: Company report (www.bankofamerica.com)
Date: January 16, 2009

TABLE 9 MERRILL LYNCH BALANCE SHEET (MILLIONS OF US DOLLARS)

Assets	**Dec 08**	**Sep 26, 08**	**Dec 07**	**Dec 06**
Current Asset				
Cash	101,326.0	223,673.0	299,014.0	223,926.0
Net Receivables	89,872.0	153,523.0	481,601.0	89,381.0
Net Fixed Assets	2,928.0	3,082.0	3,127.0	2,924.0
Other noncurrent Assets	473,417.0	495,502.0	236,303.0	525,068.0
Total Assets	667,543.0	875,780.0	1,020,050.0	841,299.0
Liabilities and Shareholder's Equity	**Dec 08**	**Sep 08**	**Dec 07**	**Dec 06**
Current Liabilities				
Accounts Payable	114,821.0	137,561.0	424,257.0	109,792.0
Short-Term Debt	130,549.0	197,717.0	24,914.0	240,734.0
Other Current Liabilities	96,107.0	90,001.0	103,987.0	84,124.0
Long-Term Debt	306,063.0	412,147.0	389,715.0	352,496.0
Other Noncurrent Liabilities	--	--	45,245.0	15,115.0
Total Liabilities	647,540.0	837,425.0	988,118.0	802,261.0
Shareholder's Equity				
Preferred Stock Equity	8,605.0	8,605.0	4,383.0	3,145.0
Common Stock Equity	11,398.0	29,750.0	27,549.0	35,893.0
Total Equity	20,003.0	38,355.0	31,932.0	39,038.0
Shares Outstanding (mil)	1,600.3	1,598.5	936.0	864.7

Sources: Company report (www.ml.com)
Date: January 16, 2009

TABLE 10 MERRILL LYNCH INCOME STATEMENT (MILLIONS OF US DOLLARS)

	Dec 08	**Dec 07**	**Dec 06**
Revenue	54,046.0	62,675.0	70,591.0
Cost of Goods Sold	1,394.0	2,442.0	--
Gross Profit	52,652.0	60,233.0	--
Gross Profit Margin	97.4%	96.1%	0.0%
SC&A Expense	64,248.0	20,738.0	23,710.0
Depreciation & Amortization	886.0	901.0	523.0
Operating Income	(12,482.0)	38,594.0	46,358.0
Operating Margin	--	61.6%	65.7%
Nonoperating Expenses	29,349.0	51,425.0	35,932.0
Income Before Taxes	(41,831.0)	(12,831.0)	10,426.0
Income Taxes	(14,280.0)	(4,194.0)	2,927.0
Net Income After Taxes	(27,551.0)	(8,637.0)	7,499.0
Continuing Operations	(27,551.0)	(8,637.0)	7,499.0
Discontinued Operations	(61.0)	860.0	--

Total Operations	(27,612.0)	(7,777.0)	7,499.0
Total Net Income	(27,612.0)	(7,777.0)	7,499.0
Net Profit Margin	--	--	10.6%
Diluted EPS from Total Net Income	(24.87)	(9.69)	7.59
Dividends Per Share	1.40	1.40	1.00

Sources: Company report (www.ml.com)
Date: January 16, 2009

TABLE 11
MERRILL LYNCH CASH FLOW STATEMENT (MILLIONS OF US DOLLARS)

	Dec 08	Dec 07	Dec 06
Net Operating Cash Flow	39.475.0	(72,362.0)	(39,414.0)
Net Investing Cash Flow	5,673.0	(7,086.0)	(11,008.0)
Net Financing Cash Flow	(18,091.0)	88,658.0	67,945.0
Net Charge in Cash	27,057.0	9,237.0	17,523.0
Depreciation & Amortization	886.0	901.0	523.0
Capital Expenditure	(630.0)	(719.0)	(1,174.0)
Cash Dividends Paid	(2,584.0)	(1,505.0)	(1,106.0)

Sources: Company report (www.ml.com)
Date: January 16, 2009

INSTRUCTOR'S GUIDE

Case Synopsis

This case provides the opportunity for the instructor to customize it to meet the learning objectives of the course. Depending upon how the case is employed, the instructor can assign various questions or activities to meet course leaning objectives for a number of courses focusing on accounting, finance, or management decisions. The emphasis is on flexibility in an active learning classroom.

Mr. Ken Lewis, Chief Executive of Bank of America, was harshly questioned about the appropriateness of his acquiring Merrill Lynch due to an earnings release on January 16, 2009 that Bank of America revealed massive losses for the 4th quarter of 2008 at Merrill Lynch. Upon the release of the earnings announcement, Bank of America's stock fell to $7.18, its lowest level in 17 years. Surprisingly, the market capitalization of Bank of America, including Merrill Lynch, was just $45 billion, which was less than the $50 billion it offered for Merrill for acquisition.

The events led up to both insiders and outsiders questioning whether the relevant accounting policies and valuation issues received the appropriate scrutiny; and whether Mr. Lewis was following appropriate protocols in making the decision to acquire Merrill Lynch.

In this case, students are placed in a decision-making role to provide a financial analysis considering different options, assessing the benefits and detriments of the acquisition, and also selecting a financial model on which the base their analysis. It provides students an opportunity to apply acquisition principles in a real-life setting. It also makes them aware of the responsibility of top management to undertake appropriate analyses.

Bloom's Taxonomy of 'Student Thinking Levels'

This case is designed to be used in ways to emphasize various levels of Bloom's student thinking taxonomy. At the lower levels, the ability to recall and to evaluate the propriety of using different ratios employs recall and understanding what the ratios represent. At the higher levels of application and analysis, students can be asked to demonstrate their thinking in terms of the importance to place on certain ratios. For the analysis and evaluation level, students can be asked to explain the tradeoffs in this acquisition and how the ratios, accounting for impairments, as well as cash versus accrual accounting assist in providing insights to strategic decisions,

Key Issues

1. Analysis for financial ratios.
2. Identification of the potential for impairment.
3. A comparison and contrast of different measures of performance: cash flows versus accrual accounting.
4. Benefits and detriments of an acquisition.
5. Due diligence matters.

Teaching Objectives

1. To provide students with the opportunity to apply financial statement analysis techniques.
2. To evaluate the appropriateness of an organization's acquisition of a target company.
3. To assess whether there has been an asset impairment and whether a write-down is needed.
4. To gain a better understanding of the impact of due diligence.
5. To explore the importance for evaluating the solvency of acquiring company.
6. To provide students with the opportunity to conduct research on this transaction and the details regarding what happened and why.

Course Suggestions

This case was written for use in multiple classes depending upon the preferences of the instructor. For example, this case could be used in Intermediate Accounting to introduce an application of financial statement analysis, in an undergraduate or graduate Financial Statement Analysis course, an application of financial statement analysis in Advanced Accounting, or in a finance or management course focusing on mergers and acquisitions. For use in Advanced Accounting, it is intended for use after the students have mastered the basics of consolidated financial statements and understand the issues related to merger and acquisition assessment. **Teaching Suggestions**

The case is best introduced to students after the instructor has covered the concepts and principles related to merger and acquisition. The students should also be assigned some practice problems to help them master the concepts before working on the case. On the day of the class discussion, students bring their written responses to questions and use them as a springboard for class discussion. Students are graded on the basis of class participation and written responses.

A one-hour period is best suited for a less structured discussion of the case. The less structured discussion is ideal for teaching the case at the more advanced or graduate level. At the end of the discussion, students may be debriefed about developments described in the epilogue section because many students are curious to know what actually happened once the event was discovered. Discussion is most productive if students are given the set of questions to be discussed at least a week before the class discussion.

The recommended approach is that students are assigned the case in groups of three or four prior to the class discussion and then have each group present in class. It allows students some discretion in terms of the ratios they choose and then engage the students in a discussion in-class regarding what set of ratios is the best. In addition, by using the data provided, students should understand the potential benefits and pitfalls of each financing alternative by contrasting and comparing the different measures and assess the degree to which accrual earnings may be driven by accruals. Furthermore, students should be able to identify that the potential for impairment has occurred (trigger) and then they need to assess whether there has been a permanent impairment. Finally, it should be reinforced to students that assuming that students write down the investment, this will change many of the ratios computed in the prior analyses and the effect should be unfavorable.

Group presentations should clearly identify the critical issues facing Bank of America, provide alternatives, recommend a solution and provide justification for the recommended solution. The time for each presentation may vary depending upon pedagogical objectives. It would be common and appropriate to allow 20 minutes. After the group presentations, each group may be allowed another 10 minutes each to present any rebuttals or additional arguments. The remainder of the period could be used by the instructor to present a summary.

DISCUSSION QUESTIONS

General Business/Strategy Questions

1. What major factors come into play in the consideration of an acquisition?
2. What are the PROS and CONS of the acquisition?
3. What is meant by a company's "due diligence"? How will it affect Bank of America's financial evaluation?

Accounting and Financial Analysis Questions

4. Prepare a list of financial ratios which you believe are important for evaluating the solvency of Bank of America.
5. Describe what each ratio you have chosen measures and why you have included it in your list.
6. Prepare a list of ratios that you believe Bank of America should have used in evaluating Merrill Lynch for purchase.
7. Compare and contrast Bank of America's and Merrill Lynch's operating cash flows and accrual earnings. Which do you think give a more accurate depiction of the company? Why?
8. Upon completion of the acquisition and the subsequent decline in the value of the share price of Merrill Lynch, what issues must the accountant consider in regards to the impairment of assets?
9. What is 'goodwill' from an acquisition? How is it recorded, accounted for, and reported?
10. How are the financial ratios calculated in 4 and 6 above impacted by an impairment charge?

DISCUSSION QUESTIONS AND ANSWERS

General Business/Strategy Questions

1. What major factors come into play in the consideration of an acquisition?

○ Obtaining market power
○ Sharing the benefits of an improved operating margin through reduction of operating costs
○ Sharing the costs and benefits of eliminating excess capacity
○ The advantage of having a more complete product line in order to be competitive
○ Response to the global market
○ The need to spread the risk of the huge cost of developing new technology
○ Response to deregulation
○ Response to industry consolidation
○ The receptivity of both the equity and debt markets to large strategic transactions
○ Pressure by activist shareholders to increase shareholder value
○ Disregard of the supposed high rate of merger failure

2. What are the PROS and CONS of the acquisition?

 Disadvantage

Too much debt – Merrill Lynch had hidden a large amount of debts from Bank of America, causing excessive valuation of Merrill Lynch. Merrill Lynch lost $21.5 billion in the fourth quarter alone of 2008. Thus the price was too high for the acquisition.

Inefficient – Merrill Lynch could have avoided excessive losses by not making so many risky investment-loans backed by unsecured or weak collaterals. For example, Merrill Lynch should not make a loan exceeding 70-80 percent of the value of the collateral, say a home loan. In other words, it cannot make a loan on property where the value of the property is less than the loan.

Fragile capital structure – The acquisition of Merrill Lynch added losses to an already fragile capital structure. Knowledge of the subsequent impending loss forced Bank of America CEO, Ken Lewis to ask the government for an additional $20 billion.

 Advantage

Diversification – Bank of America will jump from merely being one of the largest banks in the world to being a commercial-and-investment banking powerhouse. A loss by Bank of America can be offset (consolidated balance sheet) by the investment banking and security trading of Merrill Lynch and vice-versa.

Revenue enhancement – This combination in Table 4 will yield a company that has a very balanced business mix: Global-consumer and small-business banking will still be the dominant segment, despite decreasing to 48% of the total, while global- wealth management and global corporate and investment banking will increase to 32% and 20% of total revenue, respectively.

Acquisition of Merrill Lynch actually boosted Bank of America's capital ratio:
debt-to-capitalization (debt/capital). It will jump from $1.7 trillion in assets to about $2.7 trillion in assets, retaining a strong capitalization ratio.

Bank of America was able to lend money through investment banking operations of Merrill Lynch

Bank of America gained 20,000 financial advisors, most of which are from Merrill Lynch

Bank of America owned 49% ownership in BlackRock Inc., which in turns managed assets worth $1.4 trillion

3. What is meant by a company's "due diligence"? How will it affect Bank of America's financial evaluation?

Due diligence is the process through which a potential acquirer evaluates a target company or its assets for acquisition. A lot of information must be collected in order for due diligence to work.

Issues that need to be considered include:

(1). Sustainability of the business

Bank of America will want to understand the potential economic value of the business that is being bought. More specifically:

a. What is Merrill Lynch's vision?
b. What are Merrill Lynch's core competences?
c. Are there synergies with Bank of America?
d. How stable is the customer base?
e. What is the financial business plan for the next 3-5 years?

(2). Competition

Bank of America will want to understand the dynamics of the market and the most significant competitors. The international aspects of production and competition will also need to be understood if the business goes global.

(3). Financials

Typically, audited financial reports will be required and these will be reviewed by a competent outside financial auditor. If this is a company operating outside the US, the local financials will often need to be converted to US GAAP standards. Among the key financial data to be reviewed are:

a. Cash Flow
b. Days Sales Outstanding
c. Tax Rates
d. Accounts Payable
e. Long term contracts – Payable
f. Long-term liability for pensions, etc.
g. Asset Value – Book versus replacement
h. Accounting procedures and policies
i. Facility ownership structure and any leases related to facilities or equipment

(4). Potential Liabilities

It is important to understand the risk of any major financial "surprises" in the future. Often this also requires representation letters from lawyers or environmental study firms. Topics include: a. Warranty issues

b. Environmental
c. Patent infringements
d. Lawsuits
e. Pending regulatory issues
f. Unfair dismissals

(5). Business to Business Fit

Sometimes there is an additional benefit to a particular acquisition because there is a good fit between the acquiring business and the company being purchased. Among the characteristics that are important to understand are:

a. *Strategic fit*. How well does the business direction for the acquiring company fit that of the company being purchased? How well do the products and markets fit together?

b. *Personal fit.* How well will the people and cultures of the two organizations fit together?

c. *Financial fit.* If one business is growing but needs cash, while the other is profitable with limited prospects, this is a better situation than if both are cash deficient.

d. *Geographic fit.* If the acquisition gives the two companies a broader geographic reach, this is good, but it must be balanced against the costs of trying to coordinate dispersed entities.

Knowledge is power. Due diligence gives Bank of America knowledge. The more that is known about a seller's business, the better Bank of America is armed.

Accounting and Financial Analysis Questions

4. Prepare a list of financial ratios which you believe are important for evaluating the solvency of Bank of America

Debt to Asset Ratio = Total Liability/Total Asset

Dec, 2008 = 1,640,891/1,817,943 = 0.90 = 90%

This ratio indicates that 90 percent of the assets in Bank of America are financed by creditors.

Current Ratio = Current Assets/Current Liabilities

Dec, 2008 = 284,428/1,284,603 = 0.22

Industry average = 1.5

The ratio, and Bank of America's ability to meet its short-term obligations is low compared to the Industry's average.

Debt to Equity Ratio = Total Liability/Common Stockholder's Equity Dec, 2008 = 1,640,891/139,351 = 11.78

This ratio indicates the degree of protection to creditors in case of insolvency. The lower this ratio the better the company's position. Bank of America's ratio is very high, indicating that a majority of funds come from creditors.

Quick Ratio (Acid Test), Cash Ratio - Students could use EDGAR at the SEC website to find recent financial statements of the companies, and then use those financial statements to prepare the ratios.

5. Describe what each ratio you have chosen measures and why you have included it in your list. Descriptions will vary depending upon the ratios chosen. These descriptions can be used by the students in their in-class discussion above.

6. Prepare a list of ratios that you believe Bank of America should have used in evaluating Merrill Lynch for purchase.

Price/Earnings ratio = Stock Price/Earnings Per Share

Before announcement of acquisition for Sept 26, 2008 = 29.5/-10.78 = -2.74

It is a prediction or more likely an expectation of the company's performance in the future. The P/E ratio for the overall market averages around 20, so as you can see that of Merrill Lynch is negative, companies that are losing money do not have a P/E ratio.

Price/Book ratio = Stock Price/Book Value Per Share

= Market Capitalization/(total Shareholder Equity/Shares Outstanding) Before announcement of acquisition for Sept 26, 2008 = 29.5/18.59 = 1.58

High P/B ratio is often a sign that a business has rosier future prospects than its past performance.

Merrill Lynch have too low P/B ratio, which means it has problem.

At-Risk Assets to Total Assets Ratio - Students could use EDGAR at the SEC website to find recent financial statements of the companies, and then use those financial statements to prepare the ratios.

7. Compare and contrast Bank of America's and Merrill Lynch's operating cash flows and accrual earnings. Which do you think give a more accurate depiction of the company? Why?

- Cash flow accounting

It measures performance by comparing the cash inflows of a certain time period to the cash outflows of that period (e.g., cash flow from operations).

- Accrual accounting

It measures performance by comparing revenues (which are recognized when the earning process is complete) with expenses (which are recognized when assets are consumed or liabilities are created).

It is geared toward periodic performance measurement that is not skewed by investment, financing, and long-horizon operational activities.

It is based not only on cash transactions but also on credit transactions, barter exchanges, changes in prices, changes in form of assets or liabilities, and other transactions.

It records events that have cash consequences for an enterprise.

But it does not require a concurrent cash movement in order to record a transaction.

Over the entire life of a corporation, total "income" under cash flow and accrual accounting is the same. However, cash receipts in a particular period may largely reflect the effects of activities of the enterprise in earlier periods. Similarly, many of the cash outlays may relate to activities and efforts to be undertaken in future periods. The matching principle in accrual accounting addresses this limitation of cash flow accounting.

What cash flows are important? Future cash flows! When compared to current cash flows, current earnings are more highly associated with future cash flows. When compared to cash flows, earnings have a stronger association with stock prices. Earnings are superior indicators of expected future cash flows.

Therefore, operating cash flow is the cash that a company generates through running its business. It is arguably a better measure of a business's profits than accrual earnings because a company can show positive net earnings (on the income statement) and still not be able to pay its debts. It is cash flow that pays the bills! We can also use operating cash flow as a check on the quality of a company's earnings. If a firm reports record earnings but negative cash, it may be using aggressive accounting techniques.

8. Upon completion of the acquisition and the subsequent decline in the value of the share price of Merrill Lynch, what issues must the accountant consider in regards to the impairment of assets?

FASB 144 Impairment of Assets

- **Tangible Assets Held for Use** U.S. standards require impairment when the undiscounted value of expected future cash flows is less than the carrying value of the asset. Once this is determined, the cash flows are discounted to arrive at the appropriate asset value and the impairment charge represents the difference between the revaluation and the carrying value. The impairment test should be performed whenever events suggest impairment is possible. International Accounting Standards are similar except with regard to the mechanics of revaluation.
- **Goodwill and Other Intangible Assets with Indefinite Lives** must be tested at least annually for impairment, and the charge reflects any difference between the carrying value and the fair or recoverable value.
- **Amortizable Intangible Assets** are treated similarly to tangible assets held for use.
- **Tangible Assets Held for Sale** are tested for impairment when the decision is made to sell the asset. The impairment charge is the difference between the fair value, less any selling costs, and the carrying value.

Students should be able to identify that the potential for impairment has occurred (trigger) and then they need to assess whether there has been a permanent impairment.

Note – if the instructor desires, one can incorporate auditing issues into this case by asking students to assess how they would know the impairment may have occurred, what sort of evidence an auditor would be looking for, and how they would assess whether the amount was material.

9. What is 'goodwill' from an acquisition? How is it accounted for?

Goodwill is an accounting term used to reflect the portion of the value of a business entity not directly attributable to its assets and liabilities; it normally arises only in case of an acquisition. It reflects the ability of the entity to make a higher profit than would be derived from selling the tangible assets. Goodwill is an intangible asset.

10. How are the financial ratios calculated in 4 and 6 above impacted by an impairment charge?

Assuming that students write down the investment, this will change many of the ratios computed in the prior analyses and the effect should be unfavorable. Earnings will be lowered due to a loss recognition on the impairment; this will result in lower retained earnings and equity. In addition, there will be a reduction in assets. It may be important to encourage students to consider the implications of the write-down on future ratio amounts. In particular, many of the ratios will show improvements in future periods.

EPILOGUE

According to documents released on April 24, 2009 by New York Attorney General Andrew M. Cuomo, Mr. Lewis claimed that he carried out the Merrill Lynch acquisition deal due to the threats made by Ben S. Bernanke, Federal Reserve Chairman, and Henry M. Paulson, former Treasury secretary. Mr. Lewis attempted to stop the acquisition because "devastating losses" at Merrill Lynch would be detrimental to his company. However, the threats from Mr. Paulson and Mr. Bernanke changed his mind.

Mr. Lewis did not immediately inform shareholders about the losses at Merrill Lynch or the pressure from the government. As a result, Mr. Lewis was ousted as chairman of Bank of America on April 29, 2009.