



credit
TARP

WWW.PRAGERU.COM

DISCUSSION & REVIEW QUESTIONS:

- Who was more to blame for the downfall of Lehman Brothers, the executives at that firm or the U.S. Government? What is the reasoning and evidence for your conclusion?
- Why was TARP so monumental? In the end, was TARP good or bad for the US and world economies?
- Why do you think so many financial institutions were willing to lend money to borrowers who were high risk or who didn't have even a remote possibility of making their mortgage payments (so-called 'sub-prime' loans)? After reading the following: (<http://spectator.org/articles/42211/true-origins-financial-crisis>) what would your answer be?
- Do you believe that any industry is so important that the government should bail them out? What kind of message did the government send to the automobile manufacturing industry when it bailed out GM and Chrysler? Was that bailout a success? Should the government have bailed them out?
- Ms. Gelinas concludes the video by offering a straightforward solution, stating "The solution is that the government must stop guaranteeing the big banks' losses. Only then will bondholders, the big investors like pension funds and insurance companies, who lend the financial sector the money they need to operate, have an incentive to police the industry." Do you agree with this assessment, is it really that simple? Why or why not?

EXTEND THE LEARNING:

CASE STUDY: Lehman Brothers

INSTRUCTIONS: Read the article, "The Collapse of Lehman Brothers" then answer the questions that follow.

- Why did Lehman Brothers switch from a low-risk operational model to a high-risk one? What type of risks did they end up taking?
- Who was more to blame for the downfall of Lehman Brothers, the executives at that firm or the U.S. Government? What is the reasoning and evidence for your conclusion?
- Evidence has shown that Native American tribes living on reservations tend to fall into one of two extreme living conditions- either 1) tribes mostly dependent on the US Government for money each month (through entitlement programs similar to social security and food stamps) that tend to have most members living in poverty and squalor, and have higher rates of alcoholism and suicide, or 2) tribes that run casinos and/or other businesses and do not take government handouts – who instead run their own banks and economy, and comparatively tend to have most members thriving and living in much healthier conditions. Do you see this example as analogous to Wall Street and the federal government? Why or why not? What about the Hurricane Katrina disaster (<http://www.cato.org/publications/commentary/catastrophe-big-easydemonstrates-big-governments-failure>)? What conclusions can you draw in each example from an unhealthy co-dependence on the government?



QUIZ

SHOULD GOVERNMENT BAIL OUT BIG BANKS?

1. The 2008 meltdown of America's financial sector was brought about by three decades of bank de-regulation.
 - a. True
 - b. False

2. The economy can withstand a stock-market crash, but a _____ can cause a Depression.
 - a. Credit-market freeze
 - b. Surplus of goods
 - c. Unbalanced budget
 - d. Stock-market boom

3. Which of the following banks did the government NOT bail out?
 - a. Fannie Mae
 - b. Freddie Mac
 - c. Lehman Brothers
 - d. AIG

4. How do we bring sanity back to the financial industry?
 - a. By passing thousands of new regulations.
 - b. The government must stop guaranteeing the big banks' losses.
 - c. The government must keep guaranteeing the big banks' losses.
 - d. American banks must get more global investors.

5. What message did the 1998 bail out of Long-Term Capital Management send to the banks?
 - a. Take bigger risks.
 - b. Establish branches in other countries.
 - c. Take fewer risks.
 - d. None of the above.



QUIZ - ANSWER KEY

SHOULD GOVERNMENT BAIL OUT BIG BANKS?

1. The 2008 meltdown of America's financial sector was brought about by three decades of bank de-regulation.
 - a. True
 - b. False

2. The economy can withstand a stock-market crash, but a _____ can cause a Depression.
 - a. Credit-market freeze
 - b. Surplus of goods
 - c. Unbalanced budget
 - d. Stock-market boom

3. Which of the following banks did the government NOT bail out?
 - a. Fannie Mae
 - b. Freddie Mac
 - c. Lehman Brothers
 - d. AIG

4. How do we bring sanity back to the financial industry?
 - a. By passing thousands of new regulations.
 - b. The government must stop guaranteeing the big banks' losses.
 - c. The government must keep guaranteeing the big banks' losses.
 - d. American banks must get more global investors.

5. What message did the 1998 bail out of Long-Term Capital Management send to the banks?
 - a. Take bigger risks.
 - b. Establish branches in other countries.
 - c. Take fewer risks.
 - d. None of the above.

THE COLLAPSE OF LEHMAN BROTHERS

CASE STUDY

Rabia Yasmeen

LEHMAN BROTHERS - EXPOSURE TO RISKS & FAILURE TO MANAGE RISKS – CASE STUDY

Lehman Brothers was the fourth biggest investment bank in America until it filed for the bankruptcy in September 2008, less than a year after the bank presented its biggest profit ever. The case establishes an overview of the risks included in Lehman Brothers' business, how they were neglected and finally led to the downfall.

The main business areas of Lehman before the collapse were typical investment banking as well as equities, fixed income, capital markets and investment management. Their investment banking business provided financial services such as mergers and acquisitions, underwritings and issuing securities. In the other business lines, the equity part of Lehman invested in equity around the world while the fixed income, capital markets and investment management parts concerned various services and wealth management. Their main revenues came from fees derived from the size of the transactions or services provided.

It was the largest bankruptcy ever, and it still is. The bank had assets of \$639 billion, which is about as much as the five subsequently largest bankruptcies combined. The size of the bankruptcy could also be described as more than one and a half times the gross domestic product of Sweden in 2009.

Risks in Investment Banking

Before the bankruptcy, Lehman Brothers' risk management department had identified five specific risks inherent in their business.

Market risk represents the potential unfavorable change in the value of a portfolio of financial instruments due to changes in market rates, prices and volatilities.

Credit risk represents the possibility that a counterparty or obligor will be unable or unwilling to honor its contractual obligations to Lehman Brothers.

Liquidity risk is the risk that Lehman Brothers are unable to meet their payment obligations, borrow funds in the market at a good price on a regular basis, to fund actual or proposed commitments or to liquidate assets.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

Reputational risk concerns the risk of losing confidence from the customers, public and the government due to unfortunate decisions about client selection and the conduct of their business.

From Boom Years to Crisis

In order to overtake its rivals, Lehman Brothers targeted an annual growth in revenues of 15 % for which they targeted an even faster growth in total capital base, which was projected at 15 % per year. In order to achieve these expansion goals they made major changes in its business strategy. They altered from **a lower risk brokerage model to a higher risk**, more capital intensive investment banking model. Instead of making money from transactions, they shifted towards making money on long-term investments. Lehman's management primarily focused on expanding three specific areas of principal investment: commercial real estate (real estate used for generating profit, like offices), leveraged loans (loans for leverage buyouts) and private equity.

Lehman Brothers were also heavily involved in different kinds of subprime loans and mortgages. Subprime loans were loans to people which were considered financially risky and they had higher interest rates. Subprime loans had become popular and widespread because of a long period of low interest rates in the wake of the September 11 attacks and the big housing bubble followed. There were also government initiatives that encouraged banks to issue loans so that even financially weak people could buy houses.

Lehman Brothers made big profits from subprime loans as long as credit defaults were at normal rates. The model was to originate loans and turn them into securities, which means splitting many loans into tiny pieces and mixing them to even out the credit risk. The securities, called **Residential Mortgage Backed Securities**, were sold to investors to make money for the bank. Although the loans were considered risky, the securities were considered and rated to be almost as safe as state obligations. This was primarily because the loan takers were considered independent and due to ever rising real estate prices. Lehman acquired five mortgage lenders, including subprime lender BNC Mortgage and Aurora Loan Services, which specialized in Alt-A loans (made to borrowers without full documentation). Lehman's acquisitions at first seemed prescient; the firm securitized \$146 billion of mortgages in 2006 and reached a share price of \$85 in 2007 from \$4 in 1994.

However, in 2006 the interest rate started to climb and an increasing number of obligors started to default which meant a significant loss in revenues and a severe increase in **liquidity risk**. The investors realized that the securities had more risk than assumed and started to avoid them, while the rating institutes started to downgrade them. This meant that Lehman Brothers was stuck with unsellable assets with constantly falling values. Another consequence of climbing interest rates was that the demand for commercial real estate fell along with the prices. This meant further problems for Lehman Brothers, as they had to write-down their quite recently acquired commercial real estate assets. As many of the investment banks were facing trouble, the credit market uncertainty grew which meant increased loan costs on the whole market, a so called **credit crunch**. This made their leveraged loans assets difficult to sell. Lehman was left with assets they couldn't sell, assets with steadily decreasing market-values.

To make things worse they went for accumulating \$ 85 billion portfolio of mortgage securities, 4 times its shareholder's equity, when it was time to liquidate the portfolios as real estate market lived up temporarily.

In the beginning of 2008 Lehman Brothers made a quarterly loss of over \$2.5 billion. As a result of the above, there was a disastrous consequence for the **bank's reputation**. Lenders and other interdependent parties successively lost confidence in the bank which led to increasing capital costs and difficulties in getting short-term funding to maintain liquidity. The quarterly loss increased to \$3.9 billion in September 2008. Even though Lehman Brothers had managed to sell some of their assets during the year in order to decrease risk and get liquidity, the market didn't believe in Lehman Brothers and the firm became unable to borrow enough money for their daily operations.

Lehman failed to reach settlement with other banks including Bank of America and Barclays PLC. Due to their reckless behavior and disregard of risk awareness, the US government had lost confidence in the bank and chose not to intervene in the inevitable end of Lehman Brothers.

The Strategic Failures:

The liquidity risks and losses of income were amplified by the Lehman Brothers capital structure and leverage ratio. The previous leverage regulation allowed a ratio of 12 to 1. However, change of rule in 2004 they were allowed leverage ratio of 40 to 1. Lehman Brothers increased their leverage ratio from 24.4 to 30.7.

Exceeding the Risk Limits:

In 2007 raised its firm wide risk limit from \$2.3 billion to \$ 3.3 billion, justifying it by modifying the way it calculated risk it can support. In September 2007 it was increased to \$3.5 billion and \$ 4 billion in 2008. If risk limit was calculated under same assumptions it would have been \$2.5 billion.

When analyzing Lehman Brothers risk management one can conclude that Lehman's management countless times exceeded their own risk limits, ultimately exceeding their risk policies by margins of 70% as to commercial real estate and by 100% as to leverage loans. One explanation of this rather dangerous behavior is the **compensation system**. In order to attract and keep the sharpest minds in the industry, they rewarded their most revenue generating employees with big monetary bonuses. However the bonus incentives were asymmetric.

Summary of Recommendations:

It's likely that the bonus system encouraged the management to take big risks. The operational errors made when excluding assets in stress tests, exceeding established risk limits and over-leveraging the balance sheet, may have been fueled by bonus prospects. A banking system without bonuses is unthinkable for many, but another way to decrease the future bonus-related risk taking could be to build in a risk-aversion parameter in the bonus criteria. For instance, no bonuses are rewarded if stress test shows large risks, even if profits are big, although this requires stress testing to be executed by independent instances.

A lot of market risk could have been avoided if Lehman hadn't invested heavily in correlated assets. The credit crunch hit largely because of the subprime crisis and it affected both commercial real estate and leveraged loan assets. Because of the ties between the assets, Lehman

was struck quickly by losses on many fronts. The consequences of a hit in this chain could have been less fatal if the bank had been operating more diverse and not concentrated its portfolio.

They made themselves vulnerable to liquidity risks. They were depending on short term funding for long term investments, which turned out to be a fatal mistake as the credit market dried up and they were left with illiquid assets.

Also if they had done better stress testing and simulations they would have not changed their focus from brokerage and financial services. The high leverage ratio affected the other risks adversely making downfall fast and unstoppable.