

Oral Testimony of Luigi Zingales
"Causes and Effects of the Lehman Brothers Bankruptcy"
Before the Committee on Oversight and Government Reform
United States House of Representatives
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Chairman Waxman, ranking minority Davis, members of the Committee, thank you for inviting me.

The demise of Lehman Brothers is the result of its very aggressive leverage policy in the context of a major financial crisis. The roots of this crisis have to be found in bad regulation, lack of transparency, and market complacency brought about by several years of positive returns.

A prolonged period of real estate price increases and the boom of securitization relaxed lending standards. The quality of these mortgages should have been checked by the capital market that bought them, but several problems made this monitoring less than perfect.

First, these mortgages were priced based on historical records, which did not factor in the probability of a significant drop in real estate prices at the *national* level nor did they factor the effect of the changes in the lending standards on the probability of default.

Second, the massive amount of issuance by a limited number of players (of which Lehman was one) changed the fundamental nature of the relationship between credit rating agencies and the investment banks issuing these securities. As a result, instead of submitting an issue to the rating agency's judgment, investment banks shopped around for the best ratings and even received handbooks on how to produce the riskiest security that qualified for a AAA rating.

The market was not completely fooled by this process. AAA-rated asset backed securities had a higher yield than corporate AAA, a clear indication of the higher risk. Unfortunately, regulatory constraints created inflated demand for these products. Fannie Mae and Freddie Mac were allowed, even induced, to invest their funds on these securities, creating an easy arbitrage: they issued AAA rated debt and invested in higher-yield AAA debt. Another source of captive demand were money market funds. Being required to hold *only* highly rated securities, money market funds loved these instruments that satisfied the regulatory requirements and boosted their yields. Most managers of these funds were aware of the gamble they were taking, but could not resist taking it, under an intense competition for yield-hungry customers. These managers were also hoping that if a shock occurred, all their competitors would face the same problem, thereby reducing the reputational costs and possibly triggering a Government support. The September 19 decision to insure all money market funds validated this gamble, forever destroying money market managers' incentives to be careful in regard to the risks they take.

The pooling of mortgages, while beneficial for diversification purposes, became a curse as the downturn worsened. The lack of transparency in the issuing process made it difficult to determine who owned what. Furthermore, the complexity of these repackaged mortgages is such that small differences in the assumed rate of default can cause the value of some tranches to

fluctuate from 50 cents on the dollar to zero. Lacking information on the quality and hence the value of banks' assets, the market grew reluctant to lend to them, for fear of losing out in case of default.

In the case of Lehman (and other investment banks), this problem was aggravated by two factors: the extremely high level of leverage (asset-to equity ratio) and the strong reliance on short-term debt financing. While commercial banks cannot leverage their equity more than 15 to 1, Lehman had a leverage of more than 30 to 1. With this leverage, a mere 3.3% drop in the value of assets wipes out the entire value of equity and makes the company insolvent.

In turn, the instability created by the leverage problem was exacerbated by Lehman's large use of short-term debt. Reliance on short term increases the risk of "runs" similar to the ones bank face when they are rumored to be insolvent.

The Lehman CEO will likely tell you that his company was solvent and that it was brought down by a run. This is a distinct possibility. The problem is that nobody knows for sure. When Lehman went down, it had 26 billion in book equity, but the doubts about the value of its assets combined with its high degree of leverage created a huge uncertainty about the true value of this equity: it could have been worth 40 billion or negative 20. It is important to note that Lehman did not find itself in that situation by accident; it was the unlucky draw of a consciously-made gamble.

Lehman's bankruptcy forced the market to reassess risk. As after a major flood people start to buy flood insurance, after the demise of Lehman the market started to worry about several risks previously overlooked. This risk-reassessment is crucial to support a market discipline. The downside is that it can degenerate into a panic.