Study links credit default swaps, mortgage delinquencies

May 25 2015, by Brittany Magelssen

Researchers at The University of Texas at Dallas recently published the first empirical investigation connecting credit default swaps to mortgage defaults that helped lead to the 2007-2008 financial crisis.

The study, authored by finance and managerial economics professor Dr. Harold H. Zhang and associate professor Dr. Feng Zhao, was published in the April issue of the *Journal of Finance*.

The researchers found that the presence of credit default swaps further stimulated the strong demand for mortgage-backed securities, which led to lax lending standards in the mortgage origination market and encouraged predatory lending and borrowing practices. Lenders increasingly offered subprime mortgages, which inevitably drove much higher mortgage default rates.

"There are many media reports that to some extent link the financial crisis to the housing market crash, and subsequently, research has confirmed that," Zhang said. "One of the issues that people have paid particular attention to is the role played by derivative securities, and in this case, credit default swaps."

A credit default swap (CDS), in essence, acts as an insurance policy, Zhang said. When investors buy mortgage-backed securities, a CDS provides protection to the investor in case the borrower defaults on the loan.

The researchers found a direct effect between credit default swaps and higher loan default rates.

Poor quality loans were originated by lenders, and then were repackaged, securitized and sold to investors. The loans were no longer on the lenders' books, so they had less incentive to monitor the borrowers. The investors relied on their insurance policy—the CDS—and also neglected to monitor the borrowers.

"That's how the credit default swaps created more hazard issues and actually exacerbated the financial crisis, because it encouraged origination of poor quality loans," Zhang said.

But CDS coverage can be a good thing with the right oversight, he said.

"It protects investors," Zhang said. "It helps reduce the cost of financing for financial institutions, and it increases the efficiency of funds. That's always the advantage of securitization, but we should also be aware that there is this potential downside."

For the study, the researchers collaborated with global asset management firm TCW to investigate more than 9 million privately securitized subprime mortgages originated between 2003 and 2007.

Their in-depth statistical analysis found that loans originated with CDS coverage had a much higher likelihood of becoming delinquent than loans originated without CDS coverage. The researchers also found that commercial banks allocated the riskiest subprime loans to mortgage pools with CDS contracts.

"If you look at home insurance, health insurance, life insurance, it's a much regulated industry," Zhang said. "But with credit default swap there is no regulation. No one really knows how many policies have been issued or how many are outstanding. There should be a centralized clearing house collecting all this information."

Zhao said the study may have policy implications.

In a 2011 congressional hearing, SEC Commissioner Luis Aguilar spoke about how it became clear after the financial crisis that firms were creating financial products, selling them and then making bets against them.

"The U.S. Securities and Exchange Commission has been tackling conflicts of interest in securitization deals with a long list of financial crisis cases settled by the SEC and various subprime market players," Zhao said. "Our study is especially relevant as it provides the first empirical evidence in academic research to such claim pertaining to the usage of CDS."

More information: "Subprime Mortgage Defaults and Credit Default Swaps." The *Journal of Finance*, 70: 689–731. doi: 10.1111/jofi.12221

Provided by University of Texas at Dallas