

# Why Did Holdings of Highly Rated Securitization Tranches Differ So Much Across Banks?

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THE RISK INSTITUTE RESEARCH TRANSLATION SERIES

# Why Did Holdings of Highly Rated Securitization Tranches Differ So Much Across Banks?<sup>i</sup>

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During the financial crisis of 2007-2008, many observers assumed that U.S. bank holding companies used securitization to move assets from their balance sheets. They were surprised that some banks held large amounts of highly rated tranches. Researchers have developed many theories about why. But a study co-authored by two researchers from the Fisher College of Business at Ohio State University investigated those theories and determined that the holdings were related to a bank's securitization activity.

The study, "Why Did Holdings of Highly Rated Securitization Tranches Differ So Much across Banks?" was written by researchers Isil Erel and René M. Stulz of the Fisher College of Business, and Taylor Nadauld of Brigham Young University. Using a sample of 231 publicly traded companies, they examined proposed theories that explained why some banks had significant holdings of the tranches. They also found that variation in holdings of highly rated tranches is correlated with banks' securitization activities.

Highly rated tranches of securitization include AAA, AA, and A tranches of mortgage-backed securities, collateralized debt obligations, and other asset backed securities. Highly rated tranches had higher yields than did other similarly rated securities. Lower-rated tranches were often economically trivial for banks, according to the study. There would be no significant impact if they lost all of their investment.

The researchers investigated four theories: "skin the game" (securitization by-product), regulatory arbitrage, "too big to fail" thinking, and bad incentives and risk management failure. Their research supported the securitization theory that said holdings of highly rated tranches were higher for banks engaged in

securitization activity. The study found that banks with securitization activities were able to assess the expected return and risk of highly rated tranches. They also held more highly rated tranches before the crisis and their holdings increased in the years before the crisis.

They also found that variation in holdings of highly rated tranches was based on the banks' securitization activities. For example, Citigroup's holdings were 4.78 percent of its assets at the end of 2006. However, Bank of America's holding was 1.04 percent and J.P. Morgan Chase's was less than 1 percent. The average holdings across the banking sector were 1.3 percent.

The regulatory arbitrage theory was that banks that engaged more in regulatory arbitrage activities had larger holdings of highly rated tranches on their balance sheet. Regulatory arbitrage occurs because banks have to hold less regulatory capital. However, the study's findings did not support this theory. Banks that engage the most in regulatory arbitrage have less flexibility with regulatory capital than other banks, according to the study. Researchers concluded that banks that engaged in securitization do not meet that criterion.

The too-big-to-fail theory was related to banks that could be bailed out from large losses. These banks invested more in highly rated tranches of securitizations than other banks did, according to the study. The theory was these banks did not have to pay for some of the risks they took, which gave them more incentives to take more of these risks. However, the study's findings did not support this theory.

The poor incentives and risk management failure theory said banks that invested more in highly rated tranches had poor incentives, more focus on return on equity, and less central and less independent risk management. Again, the study's findings did not support this theory. According to the study, no evidence proved that banks with worse incentives held more highly rated tranches. There also was no evidence to support that holdings were related to the organization of risk management.

The research by Erel, Stulz and Nadauld eliminates some of the theories about why some banks held onto highly rated securitization tranches. The question is relevant because of the significant losses incurred. For instance, Citibank reduced the value of its assets by \$17 billion because of its holdings of highly rated tranches of securitizations, the study said.

They concluded that variation in holdings of highly rated tranches correlates with the securitization activities of banks for several reasons. Holding highly rated tranches showed that banks had skin in the game. They had to hold highly rated tranches as a part of the securitization activities because many of them made markets in highly rated tranches or held these tranches as inventories. The banks involved in securitization were better placed to assess the pricing and risk of highly rated tranches, so that investing in these securities was likely cheaper and easier for them.

## Original article

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Erel, Isil and Nadauld, Taylor and Stulz, René M., Why Did Holdings of Highly Rated Securitization Tranches Differ So Much across Banks? (February 4, 2015). Charles A. Dice Center Working Paper No. 2012-27; Fisher College of Business Working Paper No. 2012-03-027; ECGI - Finance Working Paper No. 313/2011. Available at SSRN: <http://ssrn.com/abstract=1894734> or <http://dx.doi.org/10.2139/ssrn.1894734>

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