

Review of: "An Empirical Examination of Collateralization in Financial Markets"

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Potential competing interests: No potential competing interests to declare.

Dr. Lee provides a thoughtful and timely new model examining collateralization in Financial Markets. The paper provides some wonderful insights, and a useful tool (or lens) through which to view the sensitive and timely topic of collateralization.

In the authors words, "It is worth keeping in mind that clearing does not eliminate any risk. It has no effect on the counterparty's default probability and does not improve the counterparty's credit rating. Instead, it uses some mitigation tools, e.g., collateralization, to perfectly hedge the credit risk, making a contract appear to be risk-free."

The paper gets interesting results, but would benefit from a more thorough and accurate reporting of regression results, the standard tests for stationarity, F-tests, tests for autocorrelation and hetroskedasticity should be included in the analysis. The work would also benefit from some stress tests, and an updated data set to include 2020 -2021 at least.

Suggested reading includes:

Lee, David. 2023. "Modeling Collateralization and Its Economic Significance." MPRA Paper. September 23, 2023. <https://mpra.ub.uni-muenchen.de/118678/>.

Röman, Jan R. M. 2017. "Trading Financial Instruments." In *Analytical Finance: Volume I: The Mathematics of Equity Derivatives, Markets, Risk and Valuation*, edited by Jan R. M. Röman, 1–20. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-34027-2_1.

Xiao, Tim. 2017. "A New Model for Pricing Collateralized Financial Derivatives." *The Journal of Derivatives* 24 (4): 8–20. <https://doi.org/10.3905/jod.2017.24.4.008>.

———. 2020. "Collateral Pricing Validation." *Financial Services*, May. <https://xiao.pubpub.org/pub/rmtqhd8e/release/2>.