Bank Derivatives Use and Credit Risk: Global Evidence

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Abstract

This study examines the determinants impacting the use of bank derivatives uses in global banking markets and also investigates whether and how each of the four different derivatives usages (exchange rate derivatives, interest rate derivatives, equity, commodity derivatives, or credit derivatives) affect credit risk. Moreover, this study also investigates the relationship between each different type of bank using financial derivatives held for trading (Bank holding company or Commercial banks) and credit risk. To analyze the determinants driving the use of financial derivatives and the impact on credit risk when using different types of derivatives and by different bank types using financial derivatives, a panel data model was applied, and the generalized least squares (GLS) model is used for empirical estimation. Based on 68 large banks from 21 countries using four basic derivatives between 2010 to 2021. The dataset was compiled by hand collection from financial information from annual reports and included country-level data from the World Bank and Worldwide Governance Indicators. According to empirical evidence, banks that use financial derivatives have larger bank sizes, fewer total loans, and lower bank concentration. Additionally, a bank's credit risk is decreased when using four basic types of derivatives. Besides, Derivatives used by Bank Holding Companies (BHC) and Commercial Banks (CB) also reduce credit risk.

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