

Credit Risk Management in Banks: Hard Information, Soft Information and Manipulation

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Abstract

The role of information's processing in bank intermediation is a crucial input. The bank has access to different types of information in order to manage risk through capital allocation for Value at Risk coverage. Hard information, contained in balance sheet data and produced with credit scoring, is quantitative and verifiable. Soft information, produced within a bank relationship, is qualitative and non verifiable, therefore manipulable, but produces more precise estimation of the debtor's quality. In this article, we investigate the impact of the information's type on credit risk management in a principal-agent framework with moral hazard with hidden information. The results show that access to soft information allows the banker to decrease the capital allocation for VaR coverage. We also show the existence of an incentive of the credit officer to manipulate the signal based on soft information that he produces. Therefore, we propose to implement an adequate incentive salary package which unables this manipulation. The comparison of the results from the two frameworks (information hard versus combination of hard and soft information) using simulations confirms that soft information gives an advantage to the banker but requires particular organizational modifications within the bank, as it allows to reduce capital allocation for VaR coverage.

Keywords : Hard information, Soft information, risk management, Value at Risk, moral hazard, hidden information, manipulation

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