## How Do Bank Officers Make Lending Decisions? An Exploration of Thinking Styles, Cognitive Bias and Lending Technologies

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Avhandling för avläggande av filosofie doktorsexamen i psykologi, som med vederbörligt tillstånd från Samhällsvetenskapliga Fakulteten vid Göteborgs Universitet kommer att offentligt försvaras fredagen den 23:e maj 2014 kl. 10.00 i sal F1,

Psykologiska Institutionen, Haraldsgatan 1, Göteborg.

Fakultetsopponent: Professor Eugene Sadler-Smith Faculty of Business, Economics and Law, University of Surrey, Surrey, United Kingdom

This thesis is based on the following four studies which will be referred to by their Roman numerals:

- I. Trönnberg, C-C., & Hemlin, S. (2012). Bankers' lending decision making: A psychological approach. *Managerial Finance*, 38(11), 1032-1047.
- II. Trönnberg, C-C., & Hemlin, S. (2014). Lending decision making in banks: A critical incident study of loan officers. *European Management Journal*, 32(2), 362-372.
- III. Trönnberg, C-C. (2014). Loan officers' decision-making: Lending technologies, thinking styles, lending experience and bank affiliation. Manuscript submitted for publication.
- IV. Trönnberg, C-C., Jansson, M., Montgomery, H., & Hemlin, S. (2014). *Intuitive and analytic information processing and the sunk-cost bias in lending decision making*. Unpublished manuscript.



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## **Abstract**

Trönnberg, C-C. (2014). How Do Bank Officers Make Lending Decisions? An Exploration of Thinking Styles, Cognitive Bias and Lending Technologies. Department of Psychology, University of Gothenburg, Sweden

The overall aim of this thesis was to examine how loan officers' think and act when making assessments of loan proposals from companies. The importance of valid loan assessments can be understood through the substantial economic crises that the global economy has suffered as well as the severe problems invalid lending decisions brings for both banks and clients. In Study I we conducted a review of the research on lending decision making concerning company credits between 2000 and 2010 to create a basis for subsequent research could benefit from. The results from the review tell us that lending technology influence the lending decisions, that loan officers are susceptible to cognitive biases when assessing customers and that intuitive reasoning seems to be part of lending decision making. We discussed the findings on the basis of earlier research and proposed three conclusions. In study II we examined how loan officer's make decisions about loan proposals through 88 critical incident interviews conducted in the four biggest banks in Sweden. The results showed that loan officer's used deliberate reasoning to a higher extent than intuitive reasoning when making lending decisions. Furthermore, when reporting which kind of problems the loan officers experienced, typical problems were the assessment of soft information, e.g., relationship with client. We discussed the findings on the basis of relevant decision making literature and emphasize the potential problems that could arise in lending decision making. Study III investigated the occurrence of different thinking styles among loan officers and the antecedents of lending technology. The results showed that loan officers reported a higher degree of analytic thinking than an experiential thinking style. Lending technology was shown to be a result of organizational differences, e.g., bank affiliation rather than of individual differences, e.g., thinking styles or lending experience. In Study IV, a web-based experiment was conducted to investigate the validity of different information processes in lending decision-making. The participants were induced with either an intuitive or analytic way of processing information and were then tested on their susceptibility to the sunk-cost effect. Results showed that loan officers are victims of the sunk-cost effect, but the effect is not depending on differences in intuitive and analytic information processing. In all, these studies suggest that both organizational and personal factors affects lending decision-making, that loan officers use predominately analytic rather than intuitive information processing when making decisions and that loan officers are victims of the sunk cost-effect.

Keywords: lending decision making, thinking styles, lending technology, sunk cost-effect

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