Analysis of Loan Covenants

Abstract

We for the first time ever provide evidence on loan covenants usage by the Indian banks based on primary loan data over a period from 2002 to 2011, using a two stage least squares method with five instrumental variables, and actual number of accounting based covenants in a loan contract. Our analyses of the primary data shows banks in India put more emphasis on severe non-accounting based covenants contrary to the proposition of costly contracting hypothesis. We find contradictory results in the relationship between accounting based covenants and loan category, profitability, leverage, firm size and issue of securities. We find that firm size and issue of securities have a positive relation, leverage has a negative relation, and loan category and profitability have an insignificant relation with accounting based covenants. Our study looks at non-accounting based covenants in much more greater details and find that materiality; firm-size; profitability; collateral; reserve account; and bank relationship have significant relations with the setting of non-accounting based covenants. However, the relations of bank relationship, profitability, collateral, and reserve accounts with non-accounting based covenants are contradictory when compared to relations with accounting based covenants.

We empirically evidenced the debt covenant hypothesis with respect to resubmitted approved loan proposal in the Indian banks at the loan inception stage, using three core covenants spread used by the banks for approval of their loanswith proper controlfor resubmission and non-resubmission of loan proposals at the time of approval of these loans using the distribution of earnings after management methodology and t-test statistics of the distribution. The finding of this study implies that borrowers in self-interest will avoid violating core covenants at the inception stage of a loan to get the loans approved. There is evidence of earnings management with respect to resubmitted loan proposal which are approved. We also find that 80% of the defaulted accounts belonging to the resubmitted group defaulted within three years of sanction.

We empirically evidenced the debt equity hypothesis as a proxy for debt covenant hypothesis using six variables of D/E based on popular literature for the existence, tightness and breach of loan covenants in the Indian context. Simultaneously, we compared these with nine other variables which were selected on the basis of popular literature and bank's internal process to test for a better proxy. The results implied that D/E proxy is still a better proxy. The finding of the study implies that borrower's decision on accounting policy is based on the potential effects on loan covenants. Therefore, banks should use accounting variables more carefully in the design of a loan covenant restrictions.

We analysed the relation between loan covenants and the credit risk based on selection of predictors of probability of default by the MDA and the logistic models. We evidence that there is a weak relationship between the loan covenants and the credit risk and find that only the non-financial variable – changes in loan covenants is selected as a predictor of probability of default in the logistic model. Banks can include this non-financial factor with proper weightage in the internal credit ratings model.