

Abstract

There is a widespread belief among the academics that the bond investors are sufficiently rewarded for taking higher credit risk in their investments. Recent studies confirmed that the well-behaved global markets exhibit adverse relationship of bond credit quality and required bond yield. However, there is no evidence about the Czech market. The purpose of this study is to examine the relationship between credit rating and bond yield or alternatively credit spread on the Czech bond market. As majority of Czech bond issuers are not rated we first had to develop appropriate tool how to measure their credit rating or to build suitable model for credit rating measurement. An ordered probit model is applied, using financial and company-specific data in the pool of US and EU companies structured in the panel of observations in 2008-2019. The study demonstrates that financial and company specific data are sufficient to estimate the credit rating. This model was applied to the Czech market to determine credit scores of Czech bond issuers. These credit scores were employed to examine the relationship between credit risk exposure (credit rating), bond yield and credit spread. The research did not confirm strong linear relationship between credit risk and return and suggests that there are other factors included in the risk feeling of the Czech investors or that the bonds are mispriced.

JEL Classification	C52, C58, G11 , G12, G15, G23, G33
Keywords	credit raiting, ordered probit model, Czech bond market, yield to maturity, credit spread, risk-return relationship
Title	Estimation of company credit rating by means of ordered probit model applied to Czech bond market environment