

# **Discriminatory Power and Predictions of Defaults of Structural Credit Risk Models**

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## **Summary**

This paper studies the discriminatory power and calibration quality of the structural credit risk models under the “exogenous default boundary” approach including those proposed by Longstaff and Schwartz (1995) and Collin-Dufresne and Goldstein (2001), and “endogenous default boundary” approach in Leland and Toft (1996) based on 2,050 non-financial companies in 46 economies during the period 1998 to 2005. Their discriminatory power in terms of differentiating defaulting and non-defaulting companies is adequate and the differences among them are not material. In addition, the calibration quality of the three models is similar, although limited evidence is found that the Longstaff and Schwartz model marginally outperforms the others in some subsamples. Overall, no significant difference in the capability of measuring credit risk between the “exogenous default boundary” and “endogenous default boundary” approaches is found.