

## Credit Risk Forecast of SMEs Based on Big Data Technology——Experience from China

Deke Geng Han Qiao

**Abstract:** The introduction of non-financial information such as environment, society, and corporate governance can help overcome the limitations of accounting interface data and mixed financial data in credit risk prediction of technology-based SMEs, such as missing data and small samples. However, Much non-financial information is qualitative and unstructured, with characteristics such as incomparability, certain unreliability and diversification of sources. Based on the text crawling technology of web crawler and naive Bayes classification, this paper measures qualitative information, quantifies unstructured data, and builds a credit risk model based on Support Vector Machine(SVM) with structured data to predict the short-term and long-term credit risk of SMEs. This research has important exploration value for the lack of perfect market participation mechanism and standardized financial statement system for Chinese SME credit risk forecasting.

**Keywords:** Non-financial Information, Big Data Technology, Credit Risk Prediction, Technology-based SMEs