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Development and testing of an augmented distress prediction model: A comparative study on a developed and an emerging market

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ABSTRACT

This study presents a financial distress (FD) prediction model that utilizes accounting, market-based, and financial reporting quality (FRQ) measures. We use a panel logit framework to analyze data for developed market firms from the UK and emerging market firms from Pakistan during the period 2001-2015. Obscured portions of financial reports, such as that created by management tactics employing income smoothing, can be measured with FRQ proxies. Our results find that such FRQ measures have significant influence on the accuracy of distress prediction modeling, in both the UK and Pakistani markets. Further, we validate the performance of our models through a fully non-linear classifier known as random forest methodology. Our robustness checks reveal that the predictive accuracy of our model remains high during different tranches of the business cycle and across different econometric techniques.

1. Introduction

The entry and exit of firms are a fundamental part of the functioning of the economic system. Every year, thousands of firms prosper while others fold. Although no business owner intends to fail, persistent ignorance of ongoing financial problems can have significant, negative consequences for all the stakeholders of a business. As a result, investors, creditors, managers, shareholders, and regulatory authorities all demand continuous assessment and timely reporting on the corporate likelihood of financial distress (FD). Most financial reports following the 2007–2009 global financial crisis highlighted the weaknesses of the debt management policies of many firms, as practiced in both developed and emerging markets. These

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