IT Risk Disclosure and Stock Price Crash Risk

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Abstract

As business strategies of many firms and their value creation activities are increasingly more dependent on Information Technology (IT), risks associated with IT become one of the top concerns of corporate boards. This study examines the impact of IT-related risk factor disclosure in Item 1A of the 10-K annual report on a firm’s stock price crash risk. We use a text-mining approach of Latent Dirichlet Allocation topic modeling to identify risk categories in risk disclosures between 2006 and 2017. IT risk emerged as one of the key risk categories. We find that IT risk disclosure increases a firm’s future crash risk. By specifically focusing on IT risk disclosures, we further separate IT risk factor disclosures into two broad categories: IT value risk that relates to a firm’s goals and objectives, and cyber security risk that could lead to a loss or leak of data. We find that while the impact of IT value risk disclosure on a firm’s future crash risk is marginal, that of cyber security risk disclosure on a firm’s future crash risk is significant.

* Joint work with V. Song, G. M. Lee, and L. Z. Ma

Keywords: IT; Risk factor disclosure; IT value risk; Cyber security risk; Stock price crash risk; Topic modeling.

Short Bio:

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