Financial Ratios and Corporate Endurance: A Case of the Oil and Gas Industry*

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Abstract

Abstract. A major function of financial statement analysis is to assess the risk of financial distress. Since Beaver's (1966) and Altaian's (1968) pioneering works, voluminous studies have been devoted to exploring the use of accounting information in predicting business failure. We apply survival analysis to study a class of financial distress when a financial analyst can identify an event that sets off the dynamic process of business adversity and would like to find out how long a firm can endure the adversity. We use the case of the oil and gas industry during the turmoil of the early 1980s and apply survival analysis to study how long a firm can endure this drastic oil price decline before facing financial distress. Our results indicate that the liquidity ratio, leverage ratio, operating cash flows, success in exploration, age, and size are significant factors affecting corporate endurance.

Résumé. Une fonction majeure de l'analyse des états financiers consiste à évaluer le risque de difficultés financières. Depuis les travaux d'amorce de Beaver et Altman, de volumineuses études ont été consacrées à l'analyse approfondie de l'utilisation de l'information comptable dans la prédiction des faillites d'entreprises. Les auteurs appliquent l'analyse de survie à l'étude d'une catégorie de difficultés financières pour laquelle l'analyste financier parvient à déterminer un événement qui déclenche le processus dynamique des difficultés de l'entreprise et aimerait déterminer pendant combien de temps cette dernière pourra résister à ces difficultés. Les auteurs évoquent le cas du secteur pétrolier et gazier au cours de la période tumultueuse du début des années 80 et appliquent l'analyse de survie à l'étude du temps pendant lequel une entreprise pouvait résister à un déclin radical du prix du pétrole avant d'éprouver des difficultés financières. Les résultats de l'étude démontrent que le ratio de liquidité, le ratio de levier, les flux monétaires provenant de l'exploitation, le succès des activités d'exploration, l'âge et la taille de l'entreprise sont des facteurs importants qui influent sur sa résistance.

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