Available online at www.sciencedirect.com
SCIENCE DIRECT®

ELSEVIER Journal of Accounting and Public Policy 22 (2003) 231–254

Journal of Accounting and Public Policy

www.elsevier.com/locate/jaccpubpol

The value relevance of non-financial performance variables and accounting information: the case of the airline industry

Richard A. Riley Jr. [a], Timothy A. Pearson [a,*], Greg Trompeter [b]

[a] *Division of Accounting, College of Business and Economics, West Virginia University, P.O. Box 6025, Morgantown, WV 26506, USA*

[b] *Department of Accounting, Carroll School of Management, Boston College, Chestnut Hill, MA 02467-3805, USA*

Abstract

This research examines the relative value relevance to investors of non-financial performance variables, traditional accounting variables (earnings and changes in abnormal earnings) and other financial statement information in the airline industry. Consistent with prior research, earnings and changes in abnormal earnings are employed to represent traditional accounting information. The findings suggest that accounting earnings, changes in abnormal earnings and non-financial performance variables are significantly associated with stock returns. When non-financial performance metrics, earnings and changes in abnormal accounting earnings are included in the same model, we find that non-financial performance variables exhibit incremental value relevance over traditional accounting metrics. We do not find the opposite to be true. That is, although we find the traditional accounting variables to be significantly associated with stock returns, we do not find evidence of incremental explanatory power beyond that provided by the non-financial variables. In addition, financial statement details such as revenues, gross profit, assets, etc., are examined as metrics to construct financial statement proxies that reflect value relevance similar to non-financial performance metrics. Findings suggest that such proxies for non-financial metrics, in

* Corresponding author. Tel.: +1-304-293-7847; fax: +1-304-293-0635.
E-mail address: timothy.pearson@mail.wvu.edu (T.A. Pearson).

0278-4254/03/$ - see front matter
doi:10.1016/S0278-4254(03)00021-8

combination with earnings and changes in abnormal earnings explain approximately as much of the variation in returns as the non-financial metrics.

Keywords: Stock returns; Financial performance; Non-financial performance; Customer satisfaction; Airline industry

1. Introduction

This research examines the value relevance to investors of non-financial performance variables in the airline industry. Amir and Lev (1996) demonstrate that in the wireless telecommunications industry, non-financial performance metrics are more informative to investors than reported accounting based measures. This is posited as a failure of the existing accounting and financial reporting paradigm. Birchard (1994), the AICPA Jenkins Committee (1994), Wallman (1995, 1996) and Amir and Lev (1996) express concern that financial reporting and disclosure are not keeping pace with a dynamic and constantly changing business world. The consequences of inadequate financial information, according to Wallman (1995), may be less efficient capital markets, a higher cost of capital and, possibly, a lower standard of living. To enhance traditional financial reporting, policymakers such as the AICPA Jenkins Committee (1994) and Wallman (1996) suggest that financial statement users be provided with non-financial performance information that can be used in conjunction with current financial data to better assess future financial performance. While these policymakers suggest that non-financial performance information aids in the assessment of future financial performance, research that empirically investigates the usefulness of this non-financial information is limited. This study tests the value relevance of non-financial performance information for seven of the largest airlines during the period 1988–1999 using panel data econometric techniques.

The findings show that the non-financial performance metrics, revenue load factor and available ton miles, are positively associated with stock returns while market share and customer dissatisfaction are negatively associated with stock returns. In contrast to Amir and Lev's (1996) finding for wireless communications companies, accounting earnings and changes in abnormal accounting earnings [1] are associated with stock returns for members of the airline industry. However, when both traditional accounting variables and non-financial performance variables are included in the same model, we find that non-financial (financial) performance metrics exhibit (do not exhibit) incremental explanatory power.

[1] Abnormal earnings are based on the definition provided in Ohlson (1995).