

## Chapter 15

# Environmental, Social, and Governance Disclosure and Financial Performance: Evidence From the Rail Industry

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### ABSTRACT

*The environmental, social, and governance (ESG) disclosure performance of the companies is becoming a major criterion for significant stakeholders like shareholders, creditors, and customers. In line with the increasing interest in ESG activities, a growing respective literature emerges. Despite this evolving attraction, the ESG aspects of the transport industry in general, and the rail industry in particular remain relatively untouched except for a small body of research on airlines. This study aims at filling this gap by analyzing how the ESG disclosure performance of the rail companies affect their financial performance, which the authors measure by return on assets (ROA), return on equity (ROE), and Tobin's Q. Based on a sample of 35 rail companies from nine countries over the 2007-2017 period, the analyses show that ESG disclosure performance has a positive and statistically significant association with the ROA of the rail companies.*

### 1. INTRODUCTION

The business world has been witnessing the advancement of awareness with respect to the sustainability and social issues. Accordingly, apart from financial performance measures such as profit ratios, sale figures, and stock prices, major stakeholders like investors (both small and institutional), creditors, and customers place a higher priority to achievements/activities of the companies regarding the environment and social issues. Kiron et al. (2017) document that the sustainability conduct of a company is an important investment determinant for a large majority of investment firms. Likewise, Plumlee et al. (2015)

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show how enhanced voluntary environmental disclosure leads to higher market valuation. Similarly, El Ghoul et al. (2011) and Dhaliwal et al. (2014) indicate a negative association between the cost of equity and social responsibility performance.

On the other side, from the corporate governance perspective, financial scandals like Enron, Lehman Brothers, Tyco, Arthur Andersen, Parmalat, and Marconi force financial markets to place more emphasis on corporate governance practices and transparency. As a result of this growing need, firms with enhanced corporate governance performance can not only enjoy a lower cost of debt (Bhojraj and Sengupta, 2003), but also they can lower their cost of equity (Chen et al., 2009).

Despite such growing general attraction on environmental sustainability, social responsibility, and corporate governance, the rail industry failed to draw the academic interest regarding these issues. Traditionally, the mostly unprofitable structure of the rail industry has required governments to retain state ownership to enable the continuation of this strategic public service. Therefore, with the exception of several countries having private rail companies particularly in the freight segment, state-owned rail enterprises have maintained their monopolistic positions for decades. However, the rail privatizations, especially those in the United Kingdom and Japan, created a new business environment for the industry. With the increase of private rail companies, the industry now has to comply with new market forces. As discussed earlier, what they are doing in terms sustainability, social responsibility, and corporate governance is now a major concern of their investors, lenders, and consumers.

This chapter analyzes how the ESG disclosure performance of the publicly traded rail companies affect their profitability and market valuation. We employ a sample of 35 rail companies from 9 countries over the 2007-2017 period. Our findings, based on ordinary least squares (OLS), fixed-effects (FE), and random-effects (RE) estimations, suggest that ESG disclosure performance is positively associated with the return on assets (ROA) whereas we cannot document its statistically significant effect on return on equity (ROE) and Tobin's Q. This chapter is organized as follows. Section 2 reviews the relevant literature, explains the methodology used and outlines the dataset. Section 3 reports the empirical finding of the analyses. Section 4 provides the conclusion and discusses the policy implications.

## **2. LITERATURE REVIEW, METHODOLOGY, AND DATA**

The ESG disclosure activities of the rail companies remain mostly untouched in the relevant literature. A quick review reveals only two related studies. Özcan (2018) examines the determinants of governance disclosure of the publicly traded rail companies. His findings indicate that the board size, the representation of outside directors, financial leverage, and firm size have positive association with governance disclosure whereas rail companies established in civil law countries tend to underperform their counterparts from common law countries in term of governance disclosure. In a more in-depth study, Özcan (2020) documents that government ownership has a positive effect on the ESG disclosure scores of the publicly traded rail companies. The goal of this chapter is to contribute to the literature by filling this gap. Particularly, we intend to explore the impact of ESG disclosure performance of the publicly traded rail companies on their profitability and market valuation. Our model to test these associations is as follows:

$$Y = f(\text{ESG Disclosure, Growth, Size, Leverage, Tangibility}) \quad (1)$$

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