



ELSEVIER

Contents lists available at ScienceDirect

J. Account. Public Policy

Journal homepage: www.elsevier.com/locate/jaccpubpol



Value relevance of firms' integral environmental performance: Evidence from Russia



Alexandra Middleton*

Oulu Business School, University of Oulu, Finland

A B S T R A C T

We examine the value relevance of environmental disclosures using a unique firms' integral environmental performance (IEP) measure in Russia. IEP is constructed based on data provided by the Russian Independent Ecological Rating Agency (NERA). The specific exposures of Russian companies to environmental liabilities and the IEP generate unique insight into the environmental accounting research. Using price (market to book ratio) model, we demonstrate that the coefficient on IEP is positive and significant (marginally significant), suggesting that environmental performance measures are value relevant to investors in Russia.

© 2014 Elsevier Inc. All rights reserved.

1. Introduction

The purpose of this paper is to examine the value relevance of firms' integral environmental performance (IEP) to investors in Russia. Our study provides relevant information on the value relevance of environmental performance with implications for accounting. For instance, regulators and standard setters may be interested in whether to include environmental performance measures in the compulsory part of the annual report, by introducing explicit reporting rules or standards.¹ External users, including investors, are becoming increasingly mindful of companies' environmental performance, by choosing, e.g., sustainable and responsible investments.² Our IEP aggregates measures of environmental

* Tel.: +358 8 553 2905; fax +358 8 553 2906.

E-mail address: alexandra.middleton@oulu.fi

¹ For example, since 2012 all companies listed on the London Stock Exchange are required to report carbon emissions in their annual reports.

² Investment practices that consider environmental, social and corporate governance criteria to generate long-term competitive financial returns and positive societal impact (definition from the Forum for Sustainable and Responsible Investment).

performance. Russia serves as an interesting platform for investigating the environmental performance measure due to its heavy industrial orientation and Soviet heritage, including that of obsolete machinery and environmentally authoritarian attitudes by government and regulators.

Prior studies have addressed the value relevance of environmental performance (Hassel et al., 2005; Cormier and Magnan, 2007). However, no consensus has been reached among researchers on evaluating environmental performance. Discrepancies and mixed results documented in earlier studies regarding the valuation properties of environmental performance may be due to the different proxies for environmental performance used by researchers (e.g., pollution levels, environmental ratings, and data from corporate social responsibility reports). For instance, some studies employing pollution levels as proxies for environmental performance, e.g., Cormier and Magnan (1997) and Hughes (2000), find that high pollution lowers firm value.

Studies using environmental performance measures have been limited to either a single industry, e.g., pulp and paper (Jaggi and Freedman, 1992), mining (Magness, 2006) or a single environmental performance measure, e.g., air pollution (Hughes, 2000). However, firms may affect the environment in many ways, including; water consumption, air pollution, formation of waste, etc. Not all these environmental implications are disclosed by current accounting systems (Deegan, 2008). To address the contemporary problem of climate change it is important to evaluate the environmental performance of the firm more holistically, including all possible tangible environmental impacts. Our integral environmental performance measure (IEP) is constructed from data provided by the Russian Independent Ecological Rating Agency (NERA). The measure includes the use of fresh water, the volume of (polluted) sewage, the volume of emissions of pollutants, the emissions of air pollutants from vehicles, the volume of toxic waste, and the total area of non-polluted and polluted land. This unique data is used to construct our measure and allows us to compare the value relevance of environmental performance across companies and industries.

Using data from 74 Russian listed firms for the years 2005–2007 we demonstrate that IEP is positively and significantly related to prices and marginally related to market to book ratio. We extend the literature by presenting a specific measure of environmental performance not previously discussed in the literature (e.g. Jaggi and Freedman, 1992; Dowell et al., 2000; Hassel et al., 2005). We also extend prior studies (e.g., Barth and McNichols, 1994; Griffin et al., 2012) by examining the effects of a unique measure of environmental performance in a country exposed to significant environmental liabilities.

The remainder of this paper is organized as follows. Section 2 reviews the existing studies in the field of value relevance of environmental performance and describes the situation with regard to environmental performance in Russia. The methodological choices are described in Section 3. Section 4 presents the data and Section 5 reports the results. Section 6 concludes and discusses limitations.

2. Prior literature and incremental contribution

We use integral environmental performance (IEP) and examine whether it has valuation properties for investors. Our motivation and expectations are driven by related studies on environmental performance.

Studies investigating the relationship between stock prices and environmental performance generally show that environmental performance tends to be somewhat relevant to investors, but the literature provides mixed results (Ingram and Frazier, 1980; Cormier et al., 1993; Cormier and Magnan, 1997; Barth and McNichols, 1994; Hassel et al., 2005). Clarkson et al. (2004) suggest that environmental performance is a forward-looking measure with the potential to augment the information in the current accounting earnings and book value of equity.

Barth and McNichols (1994) and Hughes (2000) use non-financial pollution measures to show that these capture the exposure of high polluting firms to future environmental liabilities. For instance, Konar and Cohen (2000) investigate how objective measurement of environmental performance is related to the market value of firms in the S&P 500 and find that poor environmental performance has a significant negative effect on the intangible asset value of firms.

Download English Version:

<https://daneshyari.com/en/article/1005859>

Download Persian Version:

<https://daneshyari.com/article/1005859>

[Daneshyari.com](https://daneshyari.com)