The Value of Climate Change Reporting of Firms: 
The Spanish Case

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ABSTRACT

Existing literature has not yet provided fully conclusive evidence on the relationship between the level of companies’ carbon disclosure, as one type of environmental information disclosure, and their financial performance. This paper studies carbon disclosure through the Carbon Disclosure Project (CDP) and observes its effect on financial performance by means of a test double carried out in the Spanish financial market. Market response to the publication of CDP reports was monitored through an event study and studying how the CDP score impacts companies’ share price using a model based in Ohlson, (1995) and developing a panel data analysis. The results confirm that the market responds to the disclosure of environmental information with an incremental effect on financial performance, which furthermore corroborates the fact that companies with better environmental performance have higher levels of environmental information disclosure, as predicted by the voluntary disclosure theory.

Keywords: Carbon Disclosure Project, Emissions Reporting, Environmental Information Disclosure, Market Value, Voluntary Disclosure Theory

1. INTRODUCTION

Investors have shown a growing interest in companies’ exposure to the risks of climate change, and to their development in terms of strategy and management. This has led to a number of information reporting standards within the framework of so-called carbon reporting. This information is specifically required in order to be part of indices such as, among others, the Dow Jones Sustainability Indexes, the Global 100 or Best in Class. It is also required by certain governments due to regulations which oblige specific entities to publish their emissions reports, as is the case in California, New South Wales, and the United Kingdom (Ratnatunga, 2007).

Within the framework of carbon reporting, the Carbon Disclosure Project (CDP) initiative may be singled out; this project aims to be a benchmark for the circulation of information to

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both public authorities and to investors and other users regarding Greenhouse Gas emissions (hereafter GHG) and companies’ environmental strategies.

The CDP was launched in December 2000 with the participation of 35 institutional investors. It was set up as a non-profit organization whose aim was to create a channel of information between shareholders and companies in order to evaluate the implications of climate change on shareholder value and business operations (CDP, 2010). The purpose of the project was to conduct research and to encourage major companies to incorporate environmentally friendly measures in their business operations. These institutional investors were concerned about unexpected future risks from climate change and from exposure to new regulations which might negatively affect profits from their investments (Hashmi, 2010). Membership has increased and today the project has over 300 investors, whose combined assets stand at more than 40 trillion dollars. The CDP questionnaire is currently returned by more than 4,000 companies worldwide, and its emissions reporting content is based on three areas: management, emissions, and risks and opportunities.

However, despite the fact that the relationship between financial performance and voluntary environmental disclosure provides an interesting subject for research (see section 2), papers seeking to determine the value of carbon disclosure for the market are scant and inconclusive (Kim and Lyon, 2011; Kolk, Levy, and Pinkse, 2008). Although Griffin and Sun (2013) have recently identified a positive relationship between companies’ market value and the voluntary disclosure of information, Lee, Park, and Klassen (2013) and Renner (2011) point to a negative correlation regarding companies’ participation in the CDP.

The aim of this study is to demonstrate in two ways if carbon disclosure, as one element of companies’ voluntary environmental disclosure, does produce an effect on their financial performance. We first undertake an event study, finding evidence that the capital market is pricing carbon reporting. Second, we use a modified version of the Ohlson (1995) valuation model, not only to complement the event study results but provide insights into the capital market’s assessment of the level of carbon disclosure in firms.

There are several reasons underlying our study. Primarily we wished to investigate further the issue raised by existing literature as to whether financial performance may be explained by environmental information, with specific reference to the area of climate change. For this purpose, public questionnaires (the CDP score) provide us with a disclosure level indicator about which there is no conclusive evidence regarding its value relevance. Our study provides further substantiation to voluntary disclosure theory, since companies’ participation in the project and their higher levels of information disclosure via this mechanism would be interpreted by the market as a sign of improved environmental performance and, accordingly, investors would utilise this information when setting those companies’ market value, thus affecting their financial performance.

Hence this study contributes to existing literature in three main aspects:

- It determines whether the profits derived from business decisions related to climate change add market value to companies;
- It provides clarification on the significant controversy surrounding the theoretical correlation which explains social behaviour underlying information disclosure practices, and its correlation with companies’ financial performance;
- It sheds light on a subject regarding which existing literature and research is as yet inconclusive, namely the usefulness of carbon disclosure to investors. It should also be noted that previous studies have been carried out in different environments (Luo, Tang, and Lan, 2013) with discrepancies in the results obtained. For this reason, this study is limited to a hitherto un-researched environment: the Spanish financial market.
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