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Determinants of corporate sustainability performance in emerging markets: the Brazilian case

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ABSTRACT

This study investigates the factors that drive high levels of corporate sustainability performance in an emerging country, Brazil. The level of said performance is proxied by membership of the Bovespa Corporate Sustainability Index. Using a framework combining stakeholder theory and a resource-based perspective, we examine the incentives for Brazilian listed firms to invest in corporate sustainability and develop a number of hypotheses that relate corporate sustainability performance both with operating and with financing characteristics. Our results indicate that Brazilian leading corporate sustainability performance firms are significantly larger and have a larger return on equity than their counterparts, which is consistent with previous findings for US firms. Additionally, Brazilian leading corporate sustainability performance firms also have significantly lower ownership concentration and they are more likely to have international listing status than their counterparts. Thus, our findings suggest that financing characteristics are likely to have higher significance in determining corporate sustainability performance in emerging markets, such as Brazil, than in developed countries.

1. Introduction

Sustainable development represents an ethical concept related to fight against poverty and protect the environment simultaneously and on a macro-level (Baumgartner and Ebner, 2010). When incorporated by the firm, it is called corporate sustainability and it contains, like the former concept, three aspects: economic, environmental and social (Baumgartner and Ebner, 2010). Engagement in activities leading to sustainable development has emerged as an important dimension of corporate voluntary practice worldwide (Lacy et al., 2010).

There is a paucity of research on the organizational determinants of corporate sustainability (Chih et al., 2010). What is more, most of the extant literature on these determinants is based on companies operating in developed countries (Bansal, 2005; Artiach et al., 2010; Ziegler and Schröder, 2010) with little known on the determinants of corporate sustainability performance in emerging countries. Our study contributes to this literature on determinants of corporate sustainability by examining empirical evidence from Brazil.

The aim of the paper is to examine the determinants of corporate sustainability performance in Brazil, as proxied by membership of the São Paulo Stock Market (Bovespa) Corporate Sustainability Index, launched in 2005. In particular, we analyze the hitherto almost unexplored effect of cross-listing on corporate sustainability. Given the focus of extant studies on companies listed in capital markets of developed countries, this issue has not been given much thought. As far as we are aware, this effect has been explored only in the case of corporate reporting of sustainability issues (Hackston and Milne, 1996; Haniffa and Cooke, 2005; Chu et al., 2013). The main purpose of this paper is to discover whether multiple listing is a factor significant in influencing corporate sustainability performance of companies listed on the Bovespa. We want to discover whether firms listed on Bovespa which are also listed in foreign capital markets are more likely to have superior sustainability performance.

We also aim at understanding whether the determinants of corporate sustainability in Brazil are different from the determinants of corporate sustainability performance in developed countries, by comparing, as far as possible, the results of this study with the results of studies undertaken in a developed country setting, such as Artiach et al. (2010). The set of explanatory factors of corporate sustainability performance related to firm operating characteristics proposed in this study is fairly similar to the one

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proposed in Artiach et al.'s (2010) study. This will allow us to establish a comparison between the operating determinants of corporate sustainability performance in a developing country, Brazil, and a developed country, USA.

We add a set of corporate characteristics related to financing activities besides those considered by Artiach et al. (2010): listing in foreign capital markets and ownership concentration. Brazil is a code law country with weak investor protection and law enforcement and with high ownership concentration, and extant research suggests that ownership concentration is a natural response to these types of environments (Lopes and de Alencar, 2010). Hence, we add this latter variable because it amounts to one of the most distinguishing aspects of the Brazilian environment when compared to the United States (Lopes and de Alencar, 2010).

This paper is organized as follows. Section 2 analyses the concept of corporate sustainability and reviews the literature on the determinants of corporate sustainability performance. Section 3 develops the theoretical framework of this study. Section 4 describes the research design and Section 5 analyzes the empirical results. Finally, Section 6 presents the summary and concluding remarks.

2. Background

Corporate sustainability has become the concept used most widely to address issues pertaining to companies' impacts on, relationships with, and responsibilities to, society. According to Labuschagne et al. (2005, p. 373) it "entails the incorporation of the objectives of sustainable development, namely social equity, economic efficiency and environmental performance, into a company's operational practices".

A wide variety of instruments through which a company can contribute to sustainable development by incorporating the social, economic and environmental dimensions of corporate sustainability in its practices have been developed (Lozano, 2012). Evidence of a growth in the importance attributed by companies to corporate sustainability and the reporting thereof is, for example, their increasingly larger interest of companies in instruments such as sustainability reporting (Lozano and Huisingh, 2011). Several initiatives have been launched by international organizations to promote corporate sustainability, such as the United Nations Global Compact (UNGC) (Perez-Batres et al., 2011), the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines (Brown et al., 2009; Marimon et al., 2012) or the International Organization for Standardization's (ISO) standard ISO 14001 giving guidance on environmental management (Marimon et al., 2011).

Searcy and Elkhawas (2012) emphasize that for the engagement with corporate sustainability to be a source of value creation firms have to define and measure their sustainability performance. They note that the development of sustainability indicators to meet said needs has been an endeavor of the academic literature, both at the firm corporation level (see, for example, Palme and Tillman, 2008) and at the industry level (see for example, Azapagic, 2004; Nordheim and Barrasso, 2007), as well as of individual firms and industry associations.

The sustainability indices linked to financial markets that have been developed around the world aim at providing investors with further insight into corporate sustainability performance (Searcy and Elkhawas, 2012). Examples of said indices are the Dow Jones Sustainability Index, the FTSE4Good, and the Bovespa Corporate Sustainability Index. They help to highlight corporations with exemplary sustainability performance (Searcy and Elkhawas, 2012). These indices may be thought of as serving as "information brokers" (Brown et al., 2009, p. 575).

An increasing number of studies on sustainability issues use sustainability indices as proxies for corporate sustainability performance (Artiach et al., 2010; Cheung, 2011; Chih et al., 2008, 2010; Collison et al., 2008; Consolandi et al., 2009; Curran and Moran, 2007; Lourenço et al., 2012; Ziegler and Schröder, 2010). Of these studies, only Artiach et al. (2010), Ziegler and Schröder (2010) and Chih et al. (2010) analyze the determinants of corporate sustainability performance.

Artiach et al. (2010) examined the incentives for US firms to invest in sustainability principles. They examined firm-specific factors associated with high corporate sustainability performance, as proxied by membership of the Dow Jones Sustainability World Index. They found that leading corporate sustainability performance firms are significantly larger, have higher levels of growth options and a higher return on equity when compared with conventional firms. However, contrary to their predictions, neither the level of cash resources available to the firm nor its leverage is an important factor in determining corporate sustainability performance.

Ziegler and Schröder (2010) examine the determinants of the inclusion of European firms in the Dow Jones Sustainability World Index and the Dow Jones Stoxx Sustainability Index. They conclude that while a restricted econometric analysis implies a positive effect of corporate financial performance, this impact becomes ambiguous in more flexible panel probit models. In addition, their analysis shows a positive effect of firm size, a negative impact of financial health and no significant influence of the risk tolerance of the management.

Chih et al. (2010) empirically investigated whether corporate sustainability is affected by financial and institutional variables, using a sample of 520 financial firms in 34 countries. They classified firms appearing in the DJSI World index as corporate sustainability firms, while those appearing in the Dow Jones World but not in the DJSI World index are classified as non-corporate sustainability firms. They concluded that: (1) larger firms will be more corporate sustainability-minded, and the link between the corporate financial performance and corporate sustainability is insignificant; (2) firms would act in more sustainable ways to enhance their competitive advantages when the market competitiveness is more intense; (3) firms in countries with stronger legal enforcement measures engage in more corporate sustainability activities, but firms in countries with stronger investor rights engage in less corporate sustainability activities; and (4) self-regulation in the financial industry has a significantly positive effect on corporate sustainability.

Although not using a sustainability index as proxy for corporate sustainability performance, one of the first studies operationalizing corporate sustainability and examining its organizational determinants, Bansal (2005) is also noteworthy. Bansal used a sample of Canadian firms in the oil and gas, mining, and forestry industries from 1986 to 1995. Interviews of industry members involved with sustainable development were conducted and company annual reports were reviewed to assess corporate sustainability. The study showed that corporate sustainability increased from 1986 to 1995. Findings suggested that international experience, media pressure, mimicry, and organizational size were positively related to corporate sustainability.

Similar studies for emerging markets are very scarce, whether focusing on individual countries or on making comparisons between countries. The purpose of this paper is to help to fill this gap by exploring the determinants of corporate sustainability performance in Brazil. Muller and Kolk (2010), Zu and Song (2009) and Li and Zhang (2010) are among the few studies on corporate sustainability conducted in the setting of emerging markets. However, their purposes and methodology are very different from ours.