Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: The role of environmental management accounting

Hengky Latana,*, Charbel Jose Chiappetta Jabbourb, Ana Beatriz Lopes de Sousa Jabbourb, Samuel Fosso Wambac, Muhammad Shahbazb

a Department of Accounting, STIE Bank BPD Jateng, Jl. Pemuda No 4 A, Semarang, 50139, Indonesia
b Montpellier Business School, Montpellier Research in Management, 2300, avenue des Moulins, 34185, Montpellier, Cédex4, France
c Toulouse Business School, Toulouse University, 20 Boulevard Lacroses, 31068, Toulouse, France

Article info
Article history:
Received 24 January 2017
Received in revised form
6 December 2017
Accepted 15 January 2018

Keywords:
Environmental strategy
Perceived environmental uncertainty
Top Management's commitment
Environmental management accounting
Corporate environmental performance

ABSTRACT
This study aims to examine the effect of the combination of corporate environmental strategy, top management commitment, and environmental uncertainty, with a focus on the role of environmental management accounting (EMA), on corporate environmental performance. Using an online survey, we collect the sample data of 107 responses in ISO 14001 certified companies listed on the Indonesia Stock Exchange. The empirical evidence shows that there is a positive and significant influence between those organizational resources (corporate environmental strategy, top management commitment, and environmental uncertainty) on the use of EMA, which in turn can improve the environmental performance of companies. These findings indicate that EMA is a useful and important tool for providing information to achieve superior corporate environmental performance in Indonesian firms and the findings also suit for companies operating in other countries in terms of developing capabilities with regards to perceived environmental uncertainty to be able to manage EMA tools and, as a consequence, to improve organizational environmental performance.

© 2018 Elsevier Ltd. All rights reserved.

1. Introduction

Environmental accounting is increasingly gaining momentum in the search for sustainable organizations (Christ and Burritt, 2015; Schaltegger and Cusotora, 2012; Schaltegger and Lüdeke-Freund, 2013). This is because stakeholders have pressured managers to focus more on environmental issues and environmental performance evaluation (Bennet et al., 2003; Burritt and Schaltegger, 2010; Rodrigue et al., 2013). In order to achieve better corporate environmental management, the implementation of environmental strategies and the use of environmental management accounting (EMA) have been considered key competitive advantages for many companies (Burritt, 2005; Gunarathne and Lee, 2015; Lisi, 2015; Wagner and Schaltegger, 2004). In this work, environmental accounting is understood as the management of monetary, physical and qualitative information on the environmental impacts and the financial consequences of environmentally relevant business activities—information that supports internal and external decision-making, reporting and accountability (Schaltegger et al., 2003).

An environmentally friendly organization tends to be dependent on the commitment of top management, which ultimately can result in the achievement of an improved competitive advantage (Spencer et al., 2013; Porter and van der Linde, 1995). The process towards a world-class environmental performance requires the involvement of company resources that includes the commitment of top management, a planning process capable of integrating corporate strategy with environmental issues, and the use of environmental management accounting (EMA). However, to date, the empirical testing of these relationships has not been extensive and has not taken into account the reality of emerging economies, such as Indonesia. Nevertheless, the literature suggests that more research is necessary to understand the Indonesian situation in...
terms of sustainability-related concepts and practices (Chapple and Moon, 2005).

This research is motivated by the lack of empirical evidence currently available on cleaner production about whether or not the use of EMA can improve the environmental performance of companies ( Jasch, 2006; Schaltegger et al., 2012). Most of the existing research linking accounting to sustainability has focused on corporate social disclosure (Mäkelä, 2017; Maas et al., 2016; Lodhia and Hess, 2014) and has been more focused on the effects of eco-efficiency on firms’ performance (Burritt and Saka, 2006; Journeault, 2016; Lee, 2012). However, several critical review studies (Derchi et al., 2015; Owen, 2008; Parker, 2011) show that there are a number of persistent gaps in the literature that have not been examined, including the role of the combined resources of the company — such as EMA, top management support, etc. — in boosting corporate greening (Hart and Dowell, 2011).

In this context, the main objective of this work is to empirically test a framework on the effects of environmental strategy, environmental uncertainties and top management commitment on improving the environmental performance of companies by considering the role played by EMA. Secondary objectives are:

1. To understand the direct and indirect (through EMA) effects of an environmental strategy on corporate environmental performance;
2. To understand the direct and indirect (through EMA) effects of top management’s commitment on corporate environmental performance;
3. To understand the direct effect of perceived environmental uncertainty on environmental management accounting.

Indonesia was chosen as the context background of this work for many reasons. The adoption of ISO 14001 certification and corporate social disclosure in Indonesia are still voluntary (Djadikerta and Trireksoni, 2012), and deserve to be better understood. Besides, Indonesia is the largest country in Southeast Asia that has faced the challenges of combining economic growth and environmental protection. Colonized by the Dutch, Indonesian territory is spread across a chain of thousands of islands between Asia and Australia. Nowadays, the country is ethnically diverse, with more than 300 local languages, with a mix of rural life and modern urban elite. Indonesia has become one of the world’s major emerging economies (BBC, 2007), and it is believed that it will become among the top economies globally by 2050 (PricewaterhouseCoopers, 2015). Academically, empirical evidence from Indonesia has been scarce (Parker, 2011; Zhong et al., 2016).

Multiple contributions are expected from this work. Firstly, this is the first study to integrate the concepts of the effect of environmental strategies, environmental uncertainties and top management commitment to the environmental performance of companies considering the role of the EMA. Following recent research in social and environmental accounting literature (Christ and Burritt, 2013; Pondeville et al., 2013; Spencer et al., 2013), this study answers the call to provide empirical evidence of these factors on firms’ performance. Although the studies of Christ and Burritt (2013) and Pondeville et al. (2013) have examined the role of contingency factors, context and strategies in influencing the EMA, the framework tested here is more comprehensive. Second, this study adds research findings from Indonesia to a field of research that has discovered mixed results. For example, Christ and Burritt (2013) found that the environmental strategy is a strong predictor of EMA, while Ferreira et al. (2010) found no association. Instead, Pondeville et al. (2013) showed that environmental uncertainty does not affect the adoption of environmental information systems, while Agbejule and Burrowes (2007) found a positive relationship.

The remainder of this paper is organized as follows. The next section presents the theoretical background and development of the hypotheses, followed by the research methodology design. Subsequently, we present our empirical results. Finally, we discuss the results and provide implications that may be useful for both academicians and practitioners.

2. Theoretical background and hypotheses development

2.1. The natural resource-based view (NRBV)

This study uses the lens of the natural resources-based view as proposed by Hart (1995) in support of the framework models tested. The NRBV argues that the competitive advantage can be maintained only if there is the ability to create profits that are supported by resources that are not easily duplicated by competitors. It consists of three interrelated strategies, namely: (1) pollution prevention; (2) product stewardship; and (3) sustainable development. Each of these have different environmental driving forces, which build upon different key resources, and they have a different source of competitive advantage. For example, removing pollutants from the production process can increase efficiency by (a) reducing the input required, (b) simplifying the process, and (c) reducing compliance costs and liabilities (Hart and Dowell, 2011). Products stewardship extends the scope to include the prevention of pollution throughout the value chain or the “life cycle” of the company’s product system. Through the commitment of top management, it can be effectively integrated into the product development process, where it will create the potential competitive advantage of the strategy adopted. Finally, a sustainable development strategy not only seeks to reduce environmental damage, but to really produce continuous environmental performance in the future in a way that can be sustained.

Moreover, if improved environmental performance is directed at the company’s reputation, this will indirectly increase the company’s ability to manage its resources. Merging the resources and capabilities in all the different parts of the company will provide even more added value. Sharma and Vredenburg (1998) stated that the company’s specific capabilities can reduce costs, improve operations, improve product quality, differentiate products, improve employee morale and enhance the company’s reputation. The NRBV with three interrelated strategies provide insights related to environmental uncertainties faced by the company.

Several studies have shown evidence through the lens of NRBV (Darnall and Edwards, 2006; Hoffman et al., 2012; Journeault, 2016) and concluded that three of these strategies can generate a sustainable competitive advantage. However, Hart and Dowell (2011) re-evaluate NRBV theory based on existing empirical research, and conclude that most of the propositions built by Hart (1995) is already supported. However, how the combination of companies’ resources influences environmental performance has not been explored further. An example of a recent study that failed to use a combination of organizational resources in its analyzes is Wijethilake (2017)’s work, which recently tested the mediating effect of EMA on the relationship between proactive sustainability strategy and corporate sustainability performance.

Considering that EMA is useful for monitoring environmental costs and recording environmental performance (Burritt and Saka, 2006), organizational resources and capabilities, such as top management commitment, environmental strategy, and awareness of environmental uncertainty will be relevant antecedents for EMA.

1. See also Hart and Dowell (2011) for the evaluation of NRBV fifteen years after.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات