Environmental Management Accounting and Environmental Performance

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Research Highlights

This paper investigates the relationship between environmental management accounting (EMA) and environmental performance in the Malaysian small-medium (SMEs) sized manufacturing sector. The issue of environmental have affected many businesses regardless of the types and sizes of organisation. Ferreira et.al. (2010) argue that the use of EMA technique is not driven by the size of a company, but by the type of industry it relates to. EMA practices involve the tracking, tracing and treatment of costs, earnings and savings incurred in relation to the company's environmental-related activities Burrit et. al. (2002). Environmental accounting is still new in Malaysia and the managers and accountants are lack of knowledge in this matter (Jusoh et al., 2018), therefore it is need more empirical evidence on EMA practices especially in developing countries, such as Malaysia. Thus, this study is important to explain the current practice of EMA in SMEs and its influence on environmental performance.

The results reveal that the physical EMA has the highest mean compared to monetary EMA. The results show that the level of EMA practices are not at an encouraging level. The regression results indicate that both types of EMA practices (monetary and physical) have a positive significant effect on environmental performance.

Research Objectives

The aims of this paper is to investigate the current state of EMA practices among small-medium manufacturing firms in Malaysia. This paper has two objectives. First, to investigate the extent of EMA practices used by SMEs to manage the environmental issues, and second, to examine the relationship between the use EMA techniques and environmental performance.

Methodology

This study used a mailed questionnaire survey because it is cheaper and a popular instrument for eliciting opinion in empirical accounting research. The population of this study is taken
from the directory of the Federation of Malaysian manufacturers (FMM). Based on the FMM’s directory for 2013, 350 samples were chosen. The respondents are manager of each firms. The managers are chosen due to the fact that they are person which considered most likely to be the decision maker in the business.

The instrument to measure EMA tools was adopted and modified based on published item of Schaltegger, Hahn and Burritt (2000)’s framework. To measure EMA tools, respondents were asked to indicate on a five point likert scale, the extent of the EMA practices adopted in the organisations. Questions about environmental performance is focusing on the reduction effect on the operation dimension, which is input and output. The questionnaire consists of twelve items scale to measure and score rating from 1 = not at all to 5 = extremely reduced to examine the effect of EMA practices towards the adoption of EMA in the organisation. The items were adopted from existing literature.

Results

Overall, the results indicate that the practice of EMA is at the little extent. The descriptive statistics results show that the physical EMA had the higher mean (2.260) compared to the monetary EMA with the mean score of 2.483. For the physical EMA practices, the life cycle inventories receive the highest mean score (3.443), while post investment of physical environmental investment appraisal receive the lowest mean score (1.914). For the monetary EMA practices, the highest mean score is target costing (mean = 3.143) and the lowest mean score is environmental long term financial planning (mean = 2.014). The regression analysis indicates that both types of EMA practices (physical and monetary) have a positive significant effect on environmental performance.

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References

Burritt, R., Hahn, T., & Schaltegger, S. (2002). Towards a Comprehensive Framework for Environmental Management Accounting - Links Between Business Actors and Environmental Management Accounting Tools, *Australian Accounting Review*, 12(2), 39-50.

Ferreira, A., Moulang, C. & Hendro, B. (2010). Environmental Management Accounting and Innovation: An exploratory analysis. *Accounting, Auditing & Accountability Journal*, 23 (7), 920-948.

R. Jusoh, N. Zulkifli, D. Zainal & N. Mokhtar. (2018). Environmental management accounting and other environmental/sustainability related practices: An exploratory case study. In Enhancing business stability through collaboration. Edited by Kuncoro, A., Viverita., Sri Rahayu Hijrah Hati & Dony Abdul Chalid. CRC Press/Balkema. Taylor & Francis Group. London.

Schaltegger, S., Hahn, T. and Burritt, R.L. (2000): Environmental Management Accounting – Overview and Main Approaches. Lueneburg: Center for Sustainability Management at the University of Lueneburg.