



ELSEVIER

Contents lists available at ScienceDirect

## The British Accounting Review

journal homepage: [www.elsevier.com/locate/bar](http://www.elsevier.com/locate/bar)

# The mediating effect of shop-floor involvement on relations between advanced management accounting practices and operational non-financial performance indicators

Ahmed Abdel-Maksoud <sup>a,\*</sup>, Walid Cheffi <sup>a</sup>, Kilani Ghoudi <sup>b</sup>

<sup>a</sup> Accounting Department, College of Business and Economics, United Arab Emirates University, United Arab Emirates

<sup>b</sup> Statistics Department, College of Business and Economics, United Arab Emirates University, United Arab Emirates

## ARTICLE INFO

## Article history:

Received 2 February 2015

Received in revised form 4 September 2015

Accepted 29 October 2015

Available online xxx

## Keywords:

Advanced management accounting practices

Manufacturing firms

Operational non-financial performance indicators

Performance measurement systems

Shop-floor involvement

Structural equation modeling

U.K.

## ABSTRACT

This study investigates the relationships between the extent of shop-floor (SF) involvement (SFI) and the deployment/use of management accounting systems (MAS) instruments; namely, advanced management accounting practices (AMAPs) and non-financial performance indicators (NFPIs). In contrast to the extant research that presumes a direct influence of the deployment of AMAPs on the use of NFPIs, we adopt a radical approach and investigate whether the extent of SFI mediates this presumed relationship between the two MAS instruments, a link overlooked in previous studies. This study investigates such a relationship at SF level; hence, operational NFPIs (ONFPIs) are considered. Our study is distinguished by validating, as its contribution, a single construct for SFI.

Structural equation modeling analyzes the data collected from cross-sectional surveys of 313 U.K. manufacturing firms. The findings show that the extent of SFI mediates the AMAPs-ONFPIs relationship; hence, it represents a key omitted link in understanding this relationship. Our findings indicate that the deployment of AMAPs influences the extent of attributed SFI, and, subsequently, that organizations prioritize the use of relevant ONFPIs in performance measurement systems (PMS) at SF level. The implications of the findings for both theory and practice are discussed.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

Management accounting systems (MAS) are described as the systematic use of management accounting to attain certain goals<sup>1</sup> (Chenhall, 2003). The MAS literature recognizes both the use of non-financial performance indicators (NFPIs) and the deployment of advanced management accounting practices (AMAPs) as instruments for MAS (Gerdin, 2005; Mia & Winata, 2008). AMAPs<sup>2</sup> have a strategic focus and consist of both financial and non-financial information

\* Corresponding author.

E-mail addresses: [aabdelmaksoud@uaeu.ac.ae](mailto:aabdelmaksoud@uaeu.ac.ae) (A. Abdel-Maksoud), [w.cheffi@uaeu.ac.ae](mailto:w.cheffi@uaeu.ac.ae) (W. Cheffi), [kghoudi@uaeu.ac.ae](mailto:kghoudi@uaeu.ac.ae) (K. Ghoudi).

<sup>1</sup> MAS are also defined as “those parts of the formalized information system used by organizations to influence the behavior of their managers that leads to the attainment of organizational objectives” (Gerdin, 2005, p. 103). MAS are said to have four dimensions: scope, integration, aggregation and timeliness. The discussion of these dimensions is beyond the scope of this study. For more details, the reader can refer to Bouwens and Abernethy (2000); Mia and Goyal (1991).

<sup>2</sup> The terms ‘innovative’, ‘new’, ‘contemporary’, and ‘advanced’ management accounting practices are used interchangeably in the literature (Abdel-Kader & Luther, 2008; Abdel-Maksoud et al., 2005; Scapens, 2006). Examples of AMAPs can be seen in the deployment of management accounting practices such as: activity-based techniques, balanced scorecard, economic value added, benchmarking techniques, etc. (see, Abdel-Maksoud et al., 2005; Abdel-Kader & Luther, 2008; Bromwich & Bhimani, 1994; Chenhall, 1997; Kaplan & Norton, 1996; Scapens, 2006).

<http://dx.doi.org/10.1016/j.bar.2015.10.002>

0890-8389/© 2015 Elsevier Ltd. All rights reserved.

Please cite this article in press as: Abdel-Maksoud, A., et al., The mediating effect of shop-floor involvement on relations between advanced management accounting practices and operational non-financial performance indicators, *The British Accounting Review* (2015), <http://dx.doi.org/10.1016/j.bar.2015.10.002>

(Chenhall, 1997; Ittner, Larcker, & Randall, 2003). The MAS literature shows that the use of NFPIs is seen as an extension of the role that management accounting played in assessing organizational performance, where the deployment of AMAPs is said to have enhanced the way in which NFPIs assist in managing organizational performance (Chenhall & Langfield-Smith, 1998). Findings in MAS studies indicate an inseparable relationship between these two instruments, and they provide empirical evidence on the direct influence that the deployment of AMAPs has on the use of NFPIs (see, Baines & Langfield-Smith, 2003).

However, the use of NFPIs has attracted interest of performance measurement systems (PMS) researchers. It is argued that, in a contemporary operating environment, organizations require more comprehensive PMS that provide performance measures which highlight the importance of a strategic business unit's operations and link to strategy (Hall, 2008; Langfield-Smith, 1997; Mia & Winata, 2008). In comprehensive PMS, measurement diversity is important where NFPIs supplement traditional financial measures (Hall, 2008; Ittner et al., 2003). Comprehensive PMS should be designed to measure performance at all organizational levels, since they provide a broad set of performance measures covering various parts of the organization's operations (Hall, 2008). Accordingly, commentators have stressed the importance of examining the attributes of performance measures, i.e. NFPIs, used in comprehensive PMS (Hall, 2008). Moreover, since an organization's strategies and objectives are achieved at every level of the organization, it is recommended that the assessment of PMS is better performed at organizational levels other than the managerial level (Hall, 2008). In particular, commentators called for the use of operational NFPIs (ONFPIs) in PMS at shop-floor (SF) level (see, Abdel-Maksoud, 2007, chap. 10; Abdel-Maksoud, Dugdale, & Luther, 2005).

PMS studies provided evidence on the relationship between the use of PMS<sup>3</sup> and employees' involvement and indicated that such systems influence employees' involvement within the organization, which in turn affects organizational goal achievement. However, commentators have questioned this presumed influence of PMS on employees' involvement, on the grounds that it lacks empirical evidence to support it (Chenhall, 2003). Not only were studies that investigated this presumption scarce, they were also at managerial level while overlooking the SF level. This has led PMS commentators to emphasise the need for empirical studies which assess the use of PMS at operational level rather than managerial level (Chenhall, 2003; Hall, 2008). Such emphasis has coincided with the evolution of MAS instruments for this operational level which has already occurred. This is evident from the sequential development stages of management accounting in the International Federation of Accountants (IFAC, 1998) where for Stages II and III, by 1965 and 1985 respectively, performance was reported at SF level, and through the 20th century, ONFPIs were formally integrated (Abdel-Maksoud et al., 2005).

In this study, we focus on ONFPIs rather than NFPIs (Abdel-Maksoud et al., 2005). The use of PMS at SF level has received great interest from writers on human resources management (HRM). HRM researchers were concerned with the role of SF involvement (SFI) in the use of performance measures (Banker, Potter, & Schroeder, 1993; Chenhall & Langfield-Smith, 2007). Interestingly, the HRM literature recognizes the crucial role of SFI in attaining organizational goals and engaging the support and contribution of the SF workforce and their commitment to organizational objectives. SFI requires the inclusion of SF staff in the decision-making process where their operations are concerned (Bratton & Gold, 2012); hence, SF staff are expected to provide suggestions to management on cost reduction and quality control, while the management provides them with regular feedback and necessary training (Abdel-Maksoud et al., 2005). However, little has been written on studies investigating the relationship between SFI and MAS instruments (Chenhall, 2003).

This role for SF staff has also been highlighted in the research about reliance on accounting performance measures (RAPM).<sup>4</sup> In the RAPM literature, budgeting participation research examines the (dys)functional consequences of subordinate participation in the budget setting process (Hartmann, 2000). Though the RAPM literature shows contradictory results regarding of the effect of employees social relations on work performance, a main finding is the key role of individuals' participation in the budgeting setting process. However, due to the inconsistency of the reported findings, commentators have called for further studies to extend the participation of employees beyond the setting of budgetary targets (Groen, Wouters, & Wilderom, 2012).

In this study, we argue that the relationship between the two MAS instruments (the deployment of AMAPs and the use of NFPIs) merits further investigation, in particular at SF level. The MAS literature indicates the direct influence that the deployment of AMAPs has had on the use of NFPIs; however, previous studies have investigated such influence at

<sup>3</sup> The PMS literature shows that prior research focused on the relationships between a comprehensive PMS and variables such as: organizational performance (Chenhall, 2005; Hoque & James, 2000; Ittner et al., 2003a, 2003b; Said, HassabElnaby, & Wier, 2003); using multiple performance measures, i.e. NFPIs, in performance evaluation judgments (Banker, Chang, & Pizzini, 2004; Lipe & Salterio, 2000; Schiff & Hoffman, 1996); and work performance and behavioral consequences (Hall, 2008; Shields et al., 2000; Webb, 2004).

<sup>4</sup> Previous studies in the RAPM literature confirm significant relationships between managers' use of performance measures and aspects such as subordinates' work-related attitude (e.g. Hartmann et al., 2010; Otley, 1978). However, findings reported in RAPM studies were inconsistent: some inferred a positive relationship while others detected a negative one; which led commentators to argue that the lack of systematic empirical evidence on the relationships between PMS and individual behaviors constitute a 'black box' and an important gap in the literature that needs research attention (Burney & Widener, 2007).

Download English Version:

<https://daneshyari.com/en/article/10489379>

Download Persian Version:

<https://daneshyari.com/article/10489379>

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