Sebastian Wolf

Management Accountants' Business Orientation and Involvement in Incentive Compensation

Empirical Results from a Cross-Sectional Survey

6

Controlling & Business Accounting



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List of abbreviations

ANN Artificial neural networks

ANOVA Analysis of variance

AT Attitude

AVE Average variance extracted

CA Cronbach's alpha

CBSEM Covariance-based structural equation modeling

CEO Chief Executive Officer

CFO Chief Financial Officer

CO Contribution of management accountants

CR Composite reliability

e.g. Exempli gratia

ED External dynamism

Ed(s). Editor(s)

EMP Size (Employees)

et al. Et alii

etc. Et cetera

f² Effect size

GM General manager

H Hypothesis

HR Human resource

ICE_E Effort effects

ICE_S Selection effects

ID Internal dynamism

i.e. Id est

IMA Involvement of management accountants (in incentive compensation)

PR Practice

Ref. Refer to

REV Size (Revenue)

SN Subjective norms

Std. dev. Standard deviation

UK United Kingdom

 Q^2 Predictive relevance measure R^2 Multiple squared correlations

SEM Structural equation modeling

US United States (of America)

List of symbols

b	. Parameter estimates
В	. Path coefficient matrix
E	. Sum of squares of prediction errors
J	. Number of bootstrap samples
k	. Total number of items of a measurement model
O	. Sum of squares of errors based on the mean of prediction
x	. Observed indicators of ξ
у	Observed indicators of η
β	(True) population parameters
Γ	Path coefficient matrix
ε	Measurement error/residuals (measurement models)
ζ	Vector of residuals (structural model)
η	Vector of endogenous construct
Θ	Unit step function
λ	Loading of a construct
Λ	Loadings matrix
ξ	Vector of exogenous construct
$\sigma_j^2 \ \dots \dots$	Variance of item j
σ_t^2	Total variance of a measurement model t

A Introduction

1 Motivation and overview of prior research

The seminal work of *Johnson/Kaplan* (1987) on a possible relevance loss of management accounting triggered a debate in academia and business practice on the need for changing roles of management accountants¹ and for new management accounting techniques. In the course of discussions on how to regain relevance, a considerable body of literature has evolved in recent years. Most of this literature advocates that management accountants should seize opportunities – for instance, those offered by advanced IT systems – and shift capacities from their 'traditional' tasks such as score keeping or 'number crunching' and place emphasis on business related activities.² Reflecting this change, it is claimed that management accountants need to become a more "pro active internal business consultant", a "business support", a "hybrid accountant", a "business-oriented management accountant".

Albeit being frequently discussed in business practice as well as in academic research, knowledge and theory in this context are, up to now, "rather underdeveloped, anecdotal and fragmented". Several calls for research underpin the need for further investigations that pursue prior findings. So far, empirical research initiatives have

The term "management accountant" basically refers to individuals offering dedicated management accounting services and operating organizations' management accounting systems, ref. Anthony/Govindarajan (2004), p. 7; Merchant/Van der Stede (2007), p. 631f.; Zimmerman (2006), p. 13-15. Overviews of management accounting, its historic origins, basic principles, or task descriptions of management accountants are offered, for instance, by Sorensen (2009) or Weber/Schäffer (2008), p. 1-36. Management accountants are, especially in German-speaking countries, sometimes also denoted as "controllers", ref. Becker/Messner (2005), p. 418f.; Sheridan (1995), p. 287; Wagenhofer (2006), p. 2. However, I only apply the term "management accountant" throughout this dissertation for consistency reasons.

Ref. Burns/Vaivio (2001).

Ref. Coad (1999), p. 109.

⁴ Ref. Burns/Vaivio (2001), p. 390.

Ref. Burns/Baldvinsdottir (2005), p. 738.

⁶ Ref. Granlund/Lukka (1998), p. 199.

Ref. Byrne/Pierce (2007), p. 469; Davis/McLaughlin (2009a), p. 35; Siegel/Sorensen/Richtermeyer (2003a), p. 39; Siegel/Sorensen/Richtermeyer (2003b), p. 37.

Järvenpää (2007), p. 102. Similarly, Bento/White (2006), p. 305; Byrne/Pierce (2007), p. 473; Granlund/Lukka (1998), p. 201.

E.g., Anthony (1987), p. 18; Atkinson et al. (1997), p. 100; Sorensen (2009), p. 1288-1290.

addressed heterogeneous aspects on business orientation and changing tasks of management accountants. 10 There are studies that comprehensively grasp the status quo and the scope of management accountants' activities and roles; comparing the results of the studies, it becomes evident that management accountants' tasks are getting more diverse over time.11 Other studies analyze advanced IT systems and show that those systems may act as enabler for change in the management accounting profession. 12 Similar studies address the drivers and the impact of an implementation of a 'new' or innovative management accounting system; the results basically reveal that businessoriented management accountants tend to implement innovative accounting systems and, furthermore, that innovative systems can positively influence the image of management accountants.13 Other studies address aspects on changes over a specific time horizon of management accounting culture; the studies point, on the one hand, to the importance of informal interventions by top managers to foster management accounting change and, on the other, to changes of the external environment as a possible trigger to change management accounting culture. 14 There are also studies that focus on the knowledge, attitudes, and characteristics of management accountants; they show, for instance, that business knowledge is important for acting in a businessoriented way. 15 Other studies analyze possible role conflicts of management accountants' different roles; exemplarily, they show inherent tension in management accountants' roles as business partners and providers of information. 16 There are also studies that assess management accountants' activities and roles from different perspectives; the results reveal that there are partly differences of perceptions between management accountants and general managers on the quality of services. 17 The influence of (na-

In addition to the brief outline of prior empirical work in this introduction, the appendix of this study offers a complementary overview of selected prior empirical research. The tabular overview especially addresses research related to the tasks and roles of management accountants and/or innovative management accounting systems.

Ref. Mouritsen (1996); Newman/Smart/Vertinsky (1989); Siegel/Sorensen (1999). The seminal work of Simon et al. (1954) can also be allocated to this group of studies.

Ref. Caglio (2003); Granlund/Malmi (2002).

Ref. Emsley (2005); Friedman/Lyne (1997); Naranjo-Gil/Maas/Hartmann (2009).

Ref. Burns/Baldvinsdottir (2005); Järvenpää (2007).

Ref. Byrne/Pierce (2007); Coad (1999); Hunton/Wier/Stone (2000); Stone/Hunton/Wier (2000).

Ref. Hopper (1980); Indjejikian/Matějka (2006); Maas/Matějka (2009).

Ref. Johnston/Brignall/Fitzgerald (2002); Pierce/O'Dea (2003).

Introduction 3

tional) culture on management accountants' roles and activities¹⁸ or the impact of organizational characteristics or an organization's industry¹⁹ on roles of management accountants is also a subject of selected studies. Finally, some research addresses the involvement of management accountants in tasks beyond their core responsibilities; those studies focus on an involvement of management accountants in managerial decision making²⁰, strategic management processes²¹, or in operational processes²².

Notwithstanding the broad strand of existing (empirical) literature in this field, relatively little is known about the consequences of management accountants' new activities and roles. ²³ For instance, there is no satisfying answer to the question regarding whether business orientation of management accountants even has a positive impact on the intended objectives. Furthermore, although studies address the process of how management accounting culture has changed, it remains unclear whether the current practice of management accountants acting in a business-oriented way depends on changes in their own attitudes or on 'pressure' from their organizational environment. ²⁴ Some scholarly attempts have been made to address the involvement of management accountants in activities other than their 'traditional' responsibilities. ²⁵ However, knowledge is still scarce on the possible results of an involvement of management accountants in other important fields such as like marketing ²⁶, procurement, or human resource (HR) management.

18 Ref. Ahrens/Chapman (2000); Granlund/Lukka (1998).

Ref. Byrne/Pierce (2007); Johnston/Brignall/Fitzgerald (2002).

Ref. Brandau/Hoffjan (2010); Granlund/Taipaleenmäki (2005); Yazdifar/Tsamenyi (2005).

Ref. Davis/McLaughlin (2009a); Sathe (1982); Zoni/Merchant (2007).

Ref. Ferreira/Moulang (2009).

Ref. Byrne/Pierce (2007), p. 474; Scapens/Bromwich (2001), p. 253. Exceptions are, for instance, Hunton/Wier/Stone (2000) or Zoni/Merchant (2007).

This question is also similarly discussed as "role-making versus role-taking" in academic literature, ref. *Katz/Kahn* (1978), p. 195-197 and 219; *Turner* (1962), p. 21f.

Ref. Byrne/Pierce (2007); Davis/McLaughlin (2009a); Ferreira/Moulang (2009); Johnston/Brignall/Fitzgerald (2002); Sathe (1982); Zoni/Merchant (2007).

E.g., the exploratory study of Roslender/Hart (2003) highlights the importance of further research on the relationships between marketing and management accounting, ref. Roslender/Hart (2003), p. 275.

2 Research objective

Reflecting the research gap, I intend to pursue the introduced stream of management accounting literature with my thesis. Thereby, I aim at filling the highlighted gap and contributing to both the specific academic body of knowledge as well as to management accounting practice. Against this background, the overall research objective of this thesis is to gain a deeper understanding of management accountants' business orientation and of management accountants' extended tasks. Two research questions are particularly raised:

Research question 1: Why do management accountants act as business partners and what is the impact of this practice on management accountants' contribution?

Guided by the identified gaps in prior literature, the first research question addresses reasons why management accountants act in a business-oriented way and analyzes the corresponding results of such behavior with a special focus on management accountants' contribution. Similar research questions have been raised in various academic disciplines. A possible approach to answering those questions is offered by the theory of reasoned action.²⁷ This theory can be employed to predict and explain the behavior of individuals. Basically, it is argued that behavior is determined by an individual's intentions, which are, in turn, influenced by the individual's attitude toward the specific behavior and by the perceived subjective norms to perform the behavior. Originating from social psychology, the theory of reasoned action has been widely applied in different academic settings and has shown sufficient reliability to predict behavior.²⁸ Thus, I derive a research model that incorporates the thoughts of this theory to better explain and understand the reasons of management accountants' activities. The derived research model also allows me to test if a business orientation of management accountants leads to the frequently postulated positive effects.

²⁷ Ref. Ajzen/Fishbein (1980); Fishbein/Ajzen (1975) and the explanations in Section 1.2 of Part C.

²⁸ Ref. Sheppard/Hartwick/Warshjaw (1988).