AN EMPIRICAL STUDY ON MANAGEMENT ACCOUNTANTS' ROLES AND ROLE PERCEPTIONS: A GERMAN PERSPECTIVE

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Abstract

The ongoing discussion on roles of management accountants (MAs) leads often to perceive the business partner (BP) role as the role of choice. Yet, many scholars and practitioners seem to assume that this role is clear to managers and MAs, that it makes sense for them and that all managers and MAs agree on it and implement it. Inconsistencies between actual roles, perceived, and expected roles might cause identity and role conflicts. However, we lack evidence of whether managers and MAs perceive, expect and act in the BP role and if tensions and conflicts might exist. This paper is based on a quantitative empirical study of a large German high-tech firm in 2019 whose top management decided to implement the BP role. We found several areas of tension in this role discussion and contribute to the literature on MAs' roles with a more nuanced view of the interaction between managers and MAs regarding MAs' roles. The study shows that there are mainly differences in business managers' expectations of MAs to the role of the BP, which the MAs do not know exactly how to fulfill.

Keywords: Management Accountants, Business Partnering, Role Theory, Role Conflict, Empirical Study

Authors' individual contribution: Conceptualization — R.R., P.U., and C.F.; Methodology — P.U. and C.F.; Formal Analysis — R.R. and P.U.; Writing — Original Draft — R.R., P.U., and C.F.; Writing — Review & Editing — R.R., P.U., and C.F.; Visualization — C.F.; Supervision — R.R., P.U., and C.F.

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1. INTRODUCTION

In recent years, there has been an enormous increase in research activities in management accounting (Guffey & Harp, 2017), which not only deal with tools and frameworks (Shields, 1998), but also with the role of both managers and management accountants (Karlsson et al., 2019). In empirical studies, the findings often focus on the one-sided analysis of the tasks and roles played by management accountants (Oesterreich et al., 2019). Here, the "bean counter" and the "business partner" should be mentioned as important roles in the management accounting literature (Goretzki & Strauss, 2017). While the bean counter represents the more operational historical basis of management accounting — the preparation of management calculations (Möller et al., 2017), the business partner should take into account the increased strategic importance of the role of management accounting and management accountants (Jones & Glover, 2018).

The role of the business partner in management accounting is becoming increasingly important from various perspectives (Chotiyanon & Joannidès de Lautour, 2018; Janin, 2017). Firstly, it

can be seen that, due to the technological changes brought about by digitization, operational topics such as cost accounting, budgeting, and reporting will probably become less important in management accounting (Quattrone, 2016).

In addition, a change in the skills of management accountants (Schäffer & Brückner, 2019) is associated with digitization (Schäffer & Weber, 2016). In the past, purely analytical skills were in demand here (Smith & Driscoll, 2017), but with the increasing demand for advice from the business partner (Wolf et al., 2015), management accountants must also develop skills in the areas of consulting, moderation, presentation and foreign languages (Botes & Sharma, 2017).

However, there are also changes on the side of the managers. Organizational and technological trends such as shared service centers (Richter & Brühl, 2017), big data (Rikhardsson & Yigitbasioglu, 2018), cloud technology (Quinn et al., 2014), agile management (Ulrich & Rieg, 2020), and self-service business intelligence (Alpar & Schulz, 2016) show that the environment of both managers and management accountants is changing and that more and more managers want to evaluate information on their own (Schlesinger & Rahman, 2016). This would also relieve management accountants of the more operational tasks in their portfolio (Erichsen, 2019). However, it is at least debatable whether managers' evaluation of information could lead to the traditional control function of management accounting (Rieg, 2018) being neglected.

The research question of this paper is as follows:

RQ: Do role expectations and role characteristics in practice differ between business managers, heads of the management accounting departments, and management accounting staff?

Our main contributions are as follows:

- From our point of view, we offer the first application of role theory with the integration of business managers, heads of management accounting, and management accounting staff in one joint study.
- We offer an integrated perspective on tasks, roles, and role perceptions.
- We carry out an empirical study on the areas mentioned above.
- We conclude that there are differences in the perceptions of business managers, heads of the management accounting department, and management accountants.

For this purpose, a quantitative study was conducted in 2019 in a large global corporation. Both business managers (BMs), heads of management accounting (HoMA) functions, and management accountants (MAs) were analyzed using an online questionnaire.

The further course of the article is as follows. In Section 2, literature findings on the role of MAs are shown and hypotheses are derived. Section 3 contains the methodology and Section 4 provides the empirical results of the conducted study. Section 5 discusses the results and Section 6 presents conclusion, limitations, and names open research questions.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Roles and role expectations of management accountants

In the literature to date, less attention has been paid to the question of how MAs actually cope with the demands of the new roles (Goretzki et al., 2013). Too often, it is automatically assumed that all those involved in the company think that the business partner (BP) role makes sense. However, perhaps there are also MAs who do not want to fill this role in terms of competence, or who see themselves more in terms of the inclinations in traditional, operationally influenced roles (Rieg, 2018).

For research, it is still largely unclear how the field of tension between managers, HoMA, and MAs presents itself. There is a presumption that the desire for MAs to take on a BP role is primarily expressed to MAs by BMs and HoMA. The mutual assessments of the perception and fulfillment of the roles of MAs are seldomly analyzed and form the basis for this paper.

From a theoretical perspective, principal-agent theory (Jensen & Meckling, 1976), role theory (Linton, 1936), conflict and power theory, and sociological neo-institutionalism (Meyer & Rowan, 1977) lend themselves to the analysis of this thematic field. At the core of this research, the field is the analysis of role conflicts and role expectations between BMs and MAs.

In business management research, there has been a discussion for some time about the areas of responsibility of people in business practice (Broderick, 1998). Concerning MAs, their tasks have been recorded in official statistics as well as in empirical studies since about the 1950s. The classic tasks of MAs have always been stated as reporting, the determination of key figures, target-performance deviations, and the execution of management calculations (Weber & Schäffer, 2001).

Since the work of Katz and Kahn (1978), which dealt with role theory, the role of MAs in companies has also been increasingly discussed in management accounting (Lambert & Sponem, 2012). However, the role itself has been discussed in business studies since Linton (1936). In Katz and Kahn's (1978) approach, a role is created by combining the tasks and skills of a task manager. An organization makes certain behavioral demands on a so-called role recipient, which this task owner can accept or influence with a certain amount of leeway, considering his possibilities. The opposite side, the role sender, sends behavioral signals to the role receiver.

Based on this rather simple model, Katz and Kahn (1978) could show that intrinsically motivated conflicts already occur with both role senders and role receivers. Also, conflicts can arise between these two groups, for example, when several senders send different role expectations (inter-transmitter conflict), when one transmitter sends contradictory signals (intra-transmitter conflict), when the roles are incompatible with each other (inter-role conflict), or when the receiver is not at peace with itself.

In management accounting, both cross-sectional and longitudinal studies have been conducted, but not always with explicit consideration of the role theory. Sunarni (2013), for example, examines the roles of MAs in Indonesia.

Clinton and White (2012) present a longitudinal study on the development of the role of MAs from 2003 to 2012. From the German-speaking area, the contributions of Goretzki and Strauss (2017), Goretzki et al. (2013), and Rieg (2018) are worth mentioning, all of which use role theory and some of which come to very interesting (and conflicting) results.

Classically, roles in role theory are associated with personalizations such as the "controller", the "bean counter", the "strategist" or the "consultant" (Schäffer & Brückner, 2019). Here, the combination of personality, tasks, and expectations becomes apparent. The above-mentioned studies all point to a change in the understanding of the MA that can be perceived in both tasks and roles. In the past, the bean counter and controller were more important. Other studies report an increase in the role of the BP.

Analogous to Dave Ulrich's HR Business Partner model (Ulrich, 1998) for the HR function, the BP role sees the MA as a strategic partner of the manager. MAs should thus offer more consulting and support services, have more personal competencies, and have fewer operational tasks than before. The study by Rieg (2018) also shows, however, that over-simplifying the role discussion does not do justice to the topic.

Fourné et al. (2018) are the first authors to present an empirically validated scale for measuring the roles of MAs. They distinguish between the scorekeeper, who more or less corresponds to the old "bean counter", the watchdog, who stands for controls and deviation analyses, and the BP, who represents the strategic side as well as the consulting competence of the MA. As already mentioned before, current trends such as self-service business intelligence, dashboarding, artificial intelligence, or automation in management accounting further contribute to the discussion about a change in the role of management accounting in companies (Keimer & Egle, 2020).

2.2. Empirical evidence and research gap

When talking about the role of MAs, it is necessary to distinguish between the two constructs "role" and "identity". While the role primarily reflects the external image of the MA, the identity can be interpreted as a manifestation of self-definition (Ahrens & Chapman, 2000).

Recently, Wolf et al. (2020) published a meta-analysis on the changing roles and identities of MAs. The authors identified 64 scientific articles in the international literature related to a change in the role and/or identity of MAs. Furthermore, the authors pointed out that there are several external as well as internal factors influencing these change processes. The educational background of the persons was named as the first external influencing factor (Byrne & Pierce, 2007). Another factor is the legal background of the country in which the MAs operate (Emsley & Chung, 2010). The public image of specific roles and identities of MA also plays an important role. Not every role is equally well regarded in society and companies, and assessments vary over time (Morales & Lambert, 2013).

In the area of internal influencing factors, among others, the image of a person and its role within the social structure of an organization should be mentioned first (Taylor & Scapens, 2016). Besides, context factors such as company size (Joshi & Bremser, 2004), industry (Aaver & Cadez, 2009), and economic situation (Endenich, 2014) of the company are also examined in the literature, as they also may influence the role of MAs.

The literature on the role of MAs is fragmented (Wolf et al., 2020). This has several reasons. On the one hand, the constructs role, identity, and role change are operationalized very differently in theoretical, conceptual, and empirical studies (Wolf et al., 2020). Secondly, there are already historically great differences in the tasks and roles of MAs (Shields, 1998) exemplified by the US-American management accounting, the German "*Controlling*" and the French "*control de gestión*". It is also not clear whether the MA can only take on one role or whether hybrid roles are also conceivable. The latter is particularly interesting because management accounting itself is a hybrid that has its roots in several areas, such as management and accounting (Miller et al., 2008).

In summary, there are several theoretical, conceptual, and empirical studies dealing with the roles and/or identities of MAs based on role theory, social identity theory, and contingency theory. To our knowledge, however, there is no study that a) combines different perspectives of accountants in companies in a multidimensional way and b) does so in the setting of a single but large case company to eliminate the external context factors. This is the advantage of our research design, as we have consciously chosen to investigate the mutual role assessments, role perceptions, and role fulfillment within a company.

2.3. Theory and hypotheses development

In our research design, we included the possibility of always searching for differences between the perceptions and actual role fulfillment of MAs, heads of the management accounting department, and BMs. The research is based on a theoretical frame of reference that summarizes the relevant theories. This can be seen in Figure 1.

We employ the following theories: isomorphism (Ashworth et al., 2009), role theory (Katz & Kahn, 1978), social identity and identity theory (Stryker, 1980; Taylor & Scapens, 2016) as well as information economics (information asymmetry, principal-agent theory). Isomorphism postulates that companies and also actors imitate the behavior of other reference objects to achieve a higher social legitimacy and economic effectiveness (Tuttle & Dillard, 2007).

First of all, there is the perspective of the divergence in both factual manifestation and expectation perspective between a BM and a MA (*H1*).

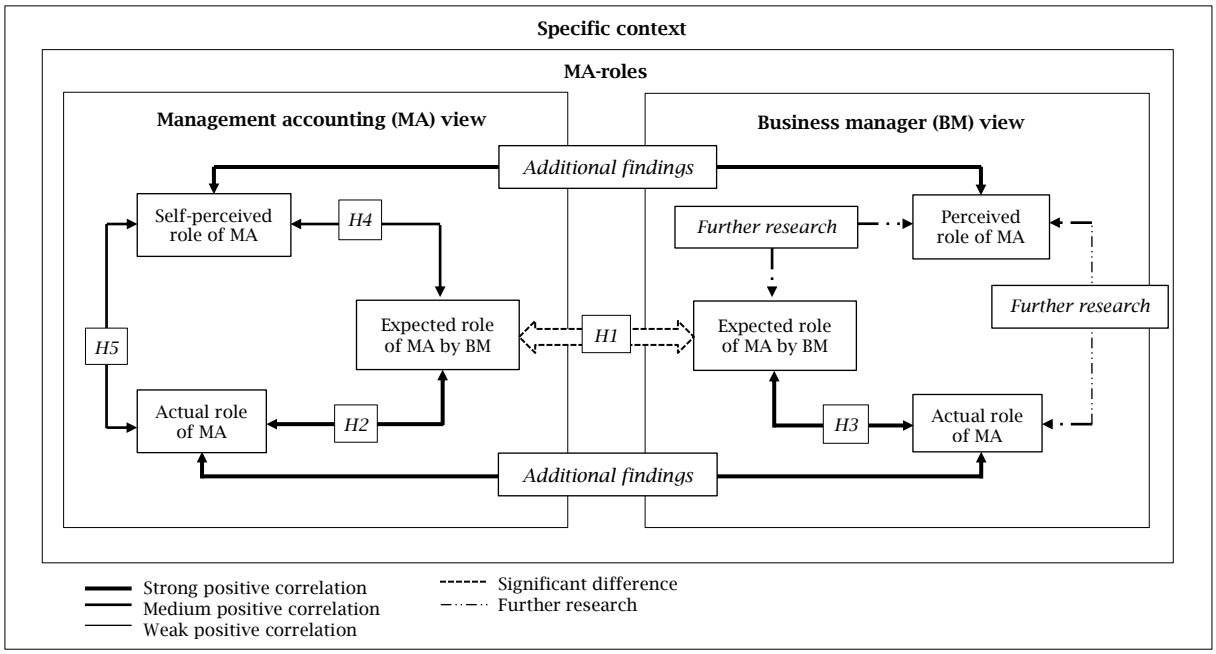
Besides, there might be a conflict between the self-perceived role of the MAs and what the MAs perceive as the role expectation of their BM (*H2*).

Our framework considers the consistency of expectations of BMs to MAs via isomorphism (*H3*). Here, the BM might assume congruence between what he expects the MA to do and what the accountant does from his perspective.

From the principal-agent perspective, there could also be a mismatch between the actual role of the MA and what they see as the expectation of the BM (*H4*).

Finally, the MA himself might suffer from a misinterpretation of his role fulfillment (*H5*).

Figure 1. Research framework



2.3.1. The first hypothesis: Role expectations of management accountants and business managers

Our first hypothesis (*H1*) is based on principal-agent theory and deals with hidden characteristics and hidden intentions. We postulate that the role expectations of the BM differ from the subjective perception of the role expectations of the BM by the MA. In other words, the BM has a certain role expectation of the MA, which is also caused by external influences — here, for example, the general acceptance of the change in the role of MAs in the specialist literature (Wadan et al., 2019) as well as the specific decision of the target company investigated to change the role of MAs more towards BPs.

In the head of the BM, thus an externally stimulated expectation of the role perception of MA is formed that he will try to communicate to the MA.

The MA in turn only receives this information filtered through communication processes and therefore has its perception of the expectations of the role fulfillment by the BM. This may create tension between the actual expectations of the BM and what the MA thinks the BM wants him to do — a classic communication and perception problem, which can lead to major problems in the development of management accounting.

Therefore, we postulate the following hypotheses:

H1a: The business manager expects the management accountant to play the role of a business partner more than the management accountant himself expects the business manager to do.

H1b: The business manager expects the management accountant to play the role of scorekeeper more than the management accountant himself expects the business manager to do.

H1c: The business manager expects the management accountant to play the role of the watchdog more than the management accountant himself expects the business manager to do.

H1d: The expectation discrepancy is largest with the role of the business partner.

2.3.2. The second hypothesis: Expected versus actual roles of management accountants

Due to hidden actions and hidden characteristics problems, MAs may perform other tasks than managers expect, so there might be differences between what the MA perceives to be the role expectation of the BM and what the MA does.

Existing literature shows that for MA, a high degree of fit between the role externally assigned to them and their own identity is particularly important. For the MA's own identity, not only the professional and personal career but also the personality as well as the own competencies play a role (Taylor & Scapens, 2016). Consequently, the MA may assume a certain role expectation from the BM. If this role expectation matches the MA's own identity, he or she will take on this role more strongly as an actual role than if the assumed role expectation does not match the view of the self-assessment.

H2a: The management accountant is less likely to take on the role of the business partner than he thinks that the business manager expects this role of him.

H2b: The management accountant is less likely to take on the role of scorekeeper than he thinks that the business manager expects this role of him.

H2c: The management accountant is less likely to take on the role of the watchdog than he thinks that the business manager expects this role of him.

H2d: The discrepancy between the two views is largest with the role of the business partner.

2.3.3. The third hypothesis: Expected role versus actual role seen by business managers

Based on isomorphism, we postulate a consistency (or potential inconsistency) between what managers expect to see as the role and what they see as the main tasks and actions of MAs. If not, there is evidence for an intra-sender conflict.

As mentioned above, the theory of isomorphism postulates that companies and their decision-makers strive for legitimacy on the part of stakeholders and society as a whole. This means that new trends and developments are often only taken up because companies believe that their legitimacy increases when they take up these trends. Whether the company then implements the trend, development, or specific instrument is less important. What is decisive is the creation of a so-called "rationality myth" similar to a Potemkin village: stakeholders see that a company picks up on development and are satisfied with it. This phenomenon has been demonstrated, for example, in the introduction of management accounting in US companies (Ribeiro & Scapens, 2006). Here, companies claimed to have implemented management accounting because they wanted to be seen as planned and well-organized in society. However, no management accounting was implemented in the company at all; rather this was only claimed externally.

Transferred to the context of the role of the MA, we postulate that managers are urged by their stakeholders to increasingly demand the role of the BP from MA, as they read this in practitioner publications, discuss it at specialist congresses and proposedly perceive the role change in other companies. Whether the role of the BP for the concrete company and the concrete dyad manager-management accountants is the right role at this point, however, is less important in this constellation. In the self-attribution, managers state that they expect their MAs to play the role of the BP since this is expected of them by the company and the stakeholders. However, this does not say anything at all about the concrete role played and the subjectivity or objectivity of the expectation.

Thus, we hypothesize as follows:

H3a: The more business managers expect their management accountants to take the role of business partners, the more they see the tasks of management accountants in line with business partnering.

H3b: The more managers expect their management accountants to take the role of watchdogs, the more they see the tasks of management accountants in line with being a watchdog.

H3c: The more managers expect their management accountants to take the role of scorekeepers, the more they see the tasks of management accountants in line with being a scorekeeper.

H3d: The previously mentioned effects are strongest for the business partner.

2.3.4. The fourth hypothesis: Expected versus the self-perceived role of management accountants

Based on role theory MAs experience a person-role conflict in that the expected role by managers does not fit the role the MAs see for themselves.

This is where potential biases in the MA's self-perception come into play. Individuals tend to adjust their self-perception to the expectations of other individuals to be at peace with themselves and to avoid cognitive dissonance (Yammarino & Atwater, 1993). We therefore hypothesize:

H4a: The more often business managers expect the management accountant to take on the role of the business partner, the more often management accountants see themselves in this role.

H4b: The more often business managers expect management accountants to take on the role of scorekeepers, the more often management accountants see themselves in this role.

H4c: The more often business managers expect management accountants to take on the role of watchdogs, the more often management accountants see themselves in this role.

H4d: The previously mentioned effects are strongest for the business partner.

2.3.5. The fifth hypothesis: Actual versus the self-perceived role of management accountants

Based on role theory (Katz & Kahn, 1978), MAs might experience a person-role conflict in that the actual role as seen by MA does not fit the role the MAs see for themselves.

Analogous to, but somewhat different from *H4*, *H5* may result in a strong divergence between the perceived role and the actual role; consequently, a role conflict might occur.

It should be noted here that the strength of this role conflict will depend on the extent to which the actual role, shaped by external expectations and one's possibilities, will diverge from the actual possibility of role fulfillment by the MA. For example, the conflict is large if a MA sees himself as a BP, but only takes on tasks and thus assumes a role for the organization that is closest to that of a watchdog or scorekeeper.

We therefore hypothesize:

H5a: The more often the management accountant sees himself as a business partner, the more the actual performance of the role diverges from this image.

H5b: The more often the management accountant sees himself as a scorekeeper, the more the actual performance of the role diverges from this image.

H5c: The more often the management accountant sees himself as a watchdog, the more the actual performance of the role diverges from this image.

H5d: The previously mentioned effects are strongest for the business partner.

3. RESEARCH METHODOLOGY

3.1. Variables and operationalization

The main variable of interest in this paper is the role of a management accountant. To capture roles taken, expected, and perceived we employed several distinct variables for measurement. In general, we distinguish between actual, expected, and perceived roles — both from BMs concerning MAs as well as MAs themselves. Furthermore, the group of MA is subdivided into heads of the management accounting function and staff members, as the expectations and role fulfillment might differ because of hierarchical differences.

Over the years, several approaches to measure the actual roles of MAs were developed (Bechtoldt et al., 2016; Hartmann & Maas, 2011; Maas & Matějka, 2009). Yet, all of them do not follow the steps needed to ensure construct validity. It is therefore not surprising to find conflicting evidence

between studies that stems in part from measuring differently. This led Hiller et al. (2014) to call for developing measurement standards. Fourné et al. (2018) followed this call and developed a measurement scale in line with tested and proposed procedures in developing scales. We apply the scales of Fourné et al. (2018) because they present valid and reliable measurement scales for the roles of MAs.

For measuring roles accordingly respondents had to rate several items. The items are then aggregated into factor scores. Fourné et al., 2018 distinguish between three roles: scorekeeper role, watchdog role, and BP role. In the scorekeeper role, management accounting performs routine tasks like monthly reporting or variance analyses and maintains internal financial systems. MAs in the watchdog role monitor performance of managers in terms of budgets and targets and ensure that managers adhere to internal performance standards and regulations. In the BP role, the main responsibility of MAs is to improve managerial decisions.

The items for measuring the BP role are listed below, and the scales for the other roles "scorekeeper" and "watchdog" are listed in the Appendix. All items are rated on a scale capturing the frequency of tasks: 1 — "never", 2 — "every six months", 3 — "every three months", 4 — "every month", 5 — "every two weeks", 6 — "every week", 7 — "multiple times per week".

- I work on scenario analyses to support strategic planning purposes;
- I discuss future business perspectives with management;
- I conduct sensitivity analyses on key drivers of business performance;
- I pro-actively explain to management how changes in non-financial performance measures affect profitability;
- I discuss strategic issues with senior management;
- I join steering committees to present the financial implications of strategic options.

It is important to note, that these three roles are not mutually exclusive. MAs perform all of them yet typically to various degrees (Fourné et al., 2018). Hence, we report the results on all roles to be comprehensive in the role discussion despite our focus on the BP role.

Expected roles represent the extent of managers expecting their MAs to perform the actual role or the extent MAs expect their managers think they should perform an actual role respectively. Hence, we asked, after presenting the items for actual roles the respondents who work as BMs:

"I expect my management accountant(s) to engage in the activities above within their current position" (1 = strongly disagree … 7 = strongly agree).

The MAs were asked a similar question:

"My manager expects me to engage in the activities above within my current position" (1 = strongly disagree … 7 = strongly agree).

With perceived roles, we asked respondents directly to identify with one of the three roles (BP, scorekeeper, and watchdog). The respondents were first presented with a short description of the three roles based on Fourné et al. (2018). MA had then to rate how far they perceive themselves in the roles on a scale from 1 (strongly disagree) to 7 (strongly agree). Similarly, BMs had to rate the item *"I see my management accountant in the role of …"*.

Table 1 summarizes the different measurements.

Table 1. Measurement of variables

Business managers' views		
Actual role	Six items aggregated with factor score (Cronbach's alpha = 0.948, variance explained 79.9%)	Factor score based on Fourné et al. (2018)
Expected role	"I expect my management accountant to engage in the [items] above within their current position".	Ordinal scale: 1 (strongly disagree) to 7 (fully agree), transformed into a z-score.
Perceived role	"I see my management accountant acting in the role of business partner".	Ordinal scale: 1 (strongly disagree) to 7 (fully agree), transformed into a z-score.
Management accountants' views		
Actual role	Six items aggregated with factor score (Cronbach's alpha = 0.773, variance explained 48.2%)	Factor score based on Fourné et al. (2018).
Expected role	"My manager expects me to engage in the [items] above within my current position".	Ordinal scale: 1 (strongly disagree) to 7 (fully agree), transformed into a z-score.
Perceived role	"My manager perceives me in the role of business partner".	Ordinal scale: 1 (strongly disagree) to 7 (fully agree), transformed into a z-score.

We base our statistical inference on correlations for *H1* to *H5* and independent sample t-test for *H5* between the various roles indicated in the three hypotheses as listed in Table 2.

Table 2. Overview of hypotheses, variables involved, and tests

Hypothesis	*Variables compared*	*Test*
H1	Expected roles MA and expected roles BM.	t-test
H2	Expected role MA and actual role MA.	correlation
H3	Expected role BM and actual role BM.	correlation
H4	Expected role MA and self-perceived role MA.	correlation
H5	Actual role MA and self-perceived role MA.	correlation

3.2. Statistical inference

Furthermore, we employ a Bayesian approach for statistical inference which answers the question we are interested in, i.e., the probability of the hypothesis given the data (p(H1|D)) and not as in the null hypothesis (H_0) significance tests (NHST) the probability of getting the data given the null hypothesis (p(D|H_0)) (Kruschke & Liddell, 2018). Avoiding NHST is also recommended by the American Statistical Association (Wasserstein & Lazar, 2016; Wasserstein et al., 2019).

The first hypothesis (*H1*) employs a t-test based on sum scores for actual roles and raw scores for expected and perceived roles and not on factor scores or z-scores. Because factorization and z-scores result in normalized values a direct comparison between

z-values for managers and MAs is fruitless. The use of sum scores of items is not undisputed (McNeish & Wolf, 2020) given that it introduces less reliable measures. But in our case with small samples and employing the same items for both groups, BMs and MAs, the potential bias would be the same and we argue that we do not expect to have distortions in the results (see also Schwall et al., 2019).

The hypotheses (from *H2* to *H5*) are tested using correlation coefficients between factor scores and z-scores because we are interested in testing statistical associations.

3.3. Sample selection and sampling procedure

To understand roles and possible role conflicts we conducted a study in a large German technology firm with several hundreds of managers and MAs. Having the same institutional framework for all respondents allows us to reduce variation caused by different industries, owner structures, or sizes. Having said that, we expect to find a clearer picture in one large firm compared to a sample with many firms, small and large.

The case company operates in the optical and optoelectronic industry with more than 30 thousand employees and generates yearly revenue above 6b euros. The company is active in 50 countries and structured into four business divisions.

The reason to approach the case company is their process of cultural change started several years ago which included a transition for MAs into the BP role. This makes the case company especially suited to understand roles and role conflicts for MAs.

We developed a questionnaire, did a pre-test and the company sent it in February until the beginning of March 2019 to 500 employees who are known as users of an online performance measurement system. The target group included BMs and MAs in all four business divisions of the firm.

We collected a total number of 129 questionnaires, 84 from MAs (43 heads of management accounting departments, 41 staff members) and 18 from BMs. Further 27 respondents were not identified as BMs or MAs and had to be excluded from the analyses.

4. RESEARCH RESULTS

4.1. Statistics on factor scores

For testing our hypotheses, we conducted a factor analysis for actual roles with principal component extraction and varimax rotation for one factor. Table 3 depicts the main statistics. First, it is interesting to note that the average sum score for roles indicates that all roles are present in the sample and the watchdog role is the one with the highest score followed by the BP role. The scorekeeper role seems to be the least important. Regarding Cronbach's alpha, the scorekeeper and BP factors show high reliability while the watchdog results in low reliability. On the other hand, all factor score statistics are on an acceptable level. In total, the results are similar to the original scale statistics of Fourné et al. (2018, p. 164).

What is apparent in Panel B of Table 3, BMs see their MAs in a higher role involvement for scorekeeper compared to what MAs actually do while the other roles are on a similar level.

Table 3. Descriptive statistics of role factor scores

Panel A: Actual role of management accountants			
n = 84	***Scorekeeper***	***Watchdog***	***Business partner***
Average sum score	2.427	4.121	3.188
No. of items	6	5	6
Reliability statistics			
Cronbach's alpha standardized	0.850	0.830	0.925
Factor score statistics			
KMO-test	0.815	0.578	0.837
Bartletts test p-value	0.000	0.000	0.000
Explained variance [%]	57.73	60.08	72.92
Panel B: Actual role of management accountants as seen by business managers			
n = 18	***Scorekeeper***	***Watchdog***	***Business partner***
Average sum score	4.130	4.067	3.167
No. of items	6	5	6
Reliability statistics			
Cronbach's alpha standardized	0.887	0.958	0.948
Factor score statistics			
KMO-test	0.604	*	0.827
Bartletts test p-value	0.000	*	0.000
Explained variance [%]	64.76	86.18	79.93

*Note: * correlation matrix not positive definite.*

4.2. Hypotheses tests

4.2.1. The first hypothesis: T-test for group differences regarding expected roles

Table 4 summarizes the results of an independent t-test between expected roles seen by MAs and BMs. There are clear differences between both groups. What is even more interesting is that BMs expect always more from MAs regardless of role.

Table 4. Differences between expected roles answered by managers and management accountants

Descriptive statistics					*Independent sample t-test*				
Role	***Group***	***n***	***Mean***	***Standard deviation***	***Mean difference***	***Pooled std. error***	***Bayes factor***	***t-value***	***p-value***
Scorekeeper	Business managers	18	5.778	1.555					
	Management accountants	84	4.357	2.010	-1.421	0.504	6.479	-2.819	0.006
Watchdog	Business managers	18	6.556	0.984					
	Management accountants	84	5.810	1.322	-0.746	0.330	1.899	-2.261	0.026
Business partner	Business managers	18	6.278	0.895					
	Management accountants	84	5.202	1.775	-1.075	0.431	3.090	-2.496	0.014

Note: Bayes factor = comparing alternative hypothesis (Ha) to the null hypothesis (H_0).

4.2.2. The second hypothesis: Test for differences between actual and expected roles of management accountants

The second hypothesis (*H2*) postulates differences between the actual role and the expected role as seen by MAs. Table 5 depicts the resulting correlations for two sub-groups: heads of the management accounting function and staff members of the management accounting function.

Table 5. Differences between actual and expected roles for management accountants

Pearson correlation with 95% credible intervals		***Head of management accounting function expected by the manager***			***Management accounting staff expected by the manager***		
		SK role	*WD role*	*BP role*	*SK role*	*WD role*	*BP role*
Actual roles	*Scorekeeper (SK) role*	0.508			0.772		
		[0.251; 0.69]			[0.605; 0.873]		
	Watchdog (WD) role		0.179			0.546	
			[-0.108; 0.45]			[0.287; 0.727]	
	Business partner (BP) role			0.227			0.687
				[-0.065; 0.48]			[0.287; 0.727]

The results do not support *H2*. On the contrary, they indicate positive correlations between actual and expected roles. This is especially true for management accounting staff. Interestingly, the results differ for heads of management accounting functions. For them, a strong positive correlation is visible for the scorekeeper role but only modestly for the business partner and watchdog role. This means that among heads of management accounting, stronger congruence exists only in the scorekeeper domain. In some cases, they see themselves more strongly as BPs and watchdogs than they actually do in reality.

4.2.3. The third hypothesis: Test of indifference of expected and actual roles of management accountants seen by business managers

The third hypothesis (*H3*) postulates indifference between expected and actual roles for MAs seen by BMs. Table 6 indicates that this is the case, especially for the BP role which supports *H3*.

Table 6. Indifference between actual and expected roles for management accountants seen by business managers

Pearson correlation with 95% credible intervals		***Business managers: Expected role for MAs***		
		SK role	*WD role*	*BP role*
Actual roles as seen by BMs	*SK role*	0.241		
		[0.017; 0.613]		
	WD role		0.172	
			[0.013; 0.576]	
	BP role			0.354
				[-0.13; 0.67]

4.2.4. The fourth hypothesis: Test of differences between the expected and self-perceived role of management accountants

The fourth hypothesis (*H4*) states that there is a difference between expected roles and self-perceived roles of MAs. Table 7 indicates indeed low correlations, for the BP and watchdog role with 95% credible intervals including zero. That supports this hypothesis that there are different views of what is expected by BMs in the view of MAs and what they themselves perceive as a role.

Table 7. Differences between self-perceived and expected roles for management accountants

Pearson correlation with 95% credible intervals		***Head of management accounting function expected by the manager***			***Management accounting staff expected by the manager***		
		SK role	*WD role*	*BP role*	*SK role*	*WD role*	*BP role*
Self-perceived role	*SK role*	0.328			0.015		
		[0.031; 0.552]			[-0.271; 0.324]		
	WD role		0.047			0.027	
			[-0.244; 0.324]			[-0.27; 0.324]	
	BP role			0.206			0.135
				[-0.101; 0.456]			[-0.166; 0.409]

4.2.5. The fifth hypothesis: Test of differences between actual roles and self-perceived roles of management accountants

The final fifth hypothesis (*H5*) postulates differences between what MAs do (actual roles) and what they perceive as roles for themselves. Table 8 depicts the results which indicate a low or non-existing concordance between an actual and self-perceived role for staff members of management functions while heads of the management function work and see themselves as a BP to a strong degree.

In Table 8, the results of the study are presented and discussed.

Table 8. Differences between actual and self-perceived for management accountants

Pearson correlation with 95% credible intervals		*Head of management accounting function self-perceived roles*			*Management accounting staff self-perceived roles*		
		SK role	*WD role*	*BP role*	*SK role*	*WD role*	*BP role*
Actual roles	*SK role*	0.277			0.037		
		[-0.015; 0.522]			[-0.269; 0.312]		
	WD role		0.057			0.187	
			[-0.228; 0.346]			[-0.117; 0.455]	
	BP role			0.474			0.038
				[0.206; 0.669]			[-0.256; 0.329]

5. DISCUSSION

The study provides insights into the extent to which the BMs expect the BP role from their MAs, what expectations they see, and how they act accordingly and perceive themselves in performing the role. The study provides evidence of the extent to which this role practice leads to tensions and conflicts in the context of BP alignment. We found several areas of tension, which are presented and discussed below.

Due to the complexity of the study, the discussion of the results takes place in two ways. First, the results are discussed alongside the hypotheses and their underlying theories. Afterwards, a comprehensive overview of the results is presented with a stronger focus on the context of roles. The results of the study are listed in Table 9.

Table 9. Final results of the study

Overview results hypotheses tests		*Hypotheses (a, b, c)*	*Groups*	*Focus role*		*Complementary roles*		*Focus role*	
				a) BP role		*b) SK role*	*c) WD role*	*d) Comparing results: BP, SK, WD*	
H1	Expectations between BM and MA	Expected roles of MA are not in line with expected roles for MA seen by BM	BM	6.278	supported	5.778	6.556	BP > SK, WD	rejected
			MA	5.202		4.357	5.810		
H2	MA: actual roles and expected roles	Actual roles are not in line with expected roles of MA	HoMA	0.227	rejected	0.508	0.179	BP > SK, WD	rejected
			MAS	0.687		0.772	0.546		rejected
H3	BM: actual roles and expected roles	Actual roles are in line with expected roles of BM	BM	0.268	supported	0.241	0.172	BP > SK, WD	supported
H4	MA: expected roles and self-perceived roles	Expected roles are not in line with self-perceived roles of MA	HoMA	0.206	supported	0.328	0.047	BP > SK, WD	rejected
			MAS	0.135		0.015	0.027		rejected
H5	MA: actual roles and self-perceived roles	Actual roles and perceived roles are not in line for MA	HoMA	0.474	rejected	0.277	0.057	BP > SK, WD	supported
			MAS	0.038	supported	0.037	0.178		supported

Note: BM = Business management/manager; MA = management accountant; HoMA = head of management accounting; MAS = Management accounting staff.

The results of the hypotheses tests relating to management accounting (*H2*, *H4*, and *H5*) are presented hierarchically differentiated for the group of head of management accounting (HoMA) and management accounting staffs (MAS). Due to the study's focus on business partnering, the results are presented primarily from the perspective of the BP role. The complementary SK and WD roles will be addressed if they allow us a deeper understanding of the BP role as part of a role portfolio in an MA organization.

5.1. The first hypothesis: Business managers' and management accountants' role expectations regarding business partner role — Evidence for differences in role expectations

The study first tests the hypothesis that the role expectations of BMs — as role senders — differ from the assumed role expectations of MAs — as role receivers — for all roles (*H1a*, *H1b*, and *H1c*). The results of the hypotheses tests support these conjectures. Not only is there a discrepancy between BMs' and MAs' role expectations regarding the BP role, but the discrepancy also includes the complementary SK and WD roles. We postulated that the discrepancy should be the largest for

the BP role (*H1d*), but this was not confirmed. The discrepancy is even larger for the WD role than for the BP role.

Several explanations come to mind. Looking first at the role of the BP, the diverging expectations point to a different understanding between BMs and MAs of what constitutes business partnering (Wolf et al., 2020). According to our results, BMs expect to exercise the BP role to a much greater extent than MAs assume. Here, there seems to be uncertainty about the scope of tasks and the desired level of interaction in the exercise of BP tasks.

The differences in expectations could also be the result of a communication deficit. However, since a cultural change was already initiated years ago in the case company, which placed the BP role at the center for MA, this does not seem convincing. It remains open whether the differences in expectations represent a transitional phenomenon in the change process, whether it is due to the quality of the implementation of the BP role, or whether there are even deeper reasons.

An analysis of the results including the complementary roles *(H1a*, *H1b*, and *H1c*) shows that the differences in expectations occur not only for the BP role but for all role types. BMs have a higher expectation in the BP role, WD role as well as SK role.

If BM expects the MA to perceive all roles more intensively than they suspect themselves, this indicates either an imbalance of qualitative or quantitative resources in the management accounting function or deficits in expectation management. For MAs, quantitative or qualitative aspects can be causes for role overload: expectations require more than the time available to meet them, or expectations exceed the capabilities of those who want to meet the expectations (Byrne & Pierce, 2007, 2018).

From the MA perspective, the WD role is the one with the highest actual role expression, followed by the BP role and the SK role (see Table 3, Panel A). For BMs, the ranking is different. For them, the SK role has the highest expression followed by the WD role and lastly the BP role (see Table 3, Panel B). BMs have a stronger perception of the MA in the WD role and a weaker perception of the BP role. The results indicate relevant differences in the perception of BMs and MAs. It becomes clear that a singular consideration of the BP role does not provide the same insights into role occurrence as the consideration of the roles as a role set.

The BMs expect their MAs to have stronger role expression in all three roles, not just the BP role. This contradicts the notion of a clear shift in roles toward BP. BP will continue to be only one of the MA roles in this organization, meaning BMs will continue to demand the other roles. This is also consistent with the findings of other studies that find hybrid roles of MAs in practice (Karlsson et al., 2019).

5.2. The second hypothesis: Management accountants — Reject a mismatch of actual roles and expected roles

Following the comparison of expectations between BMs and MAs, *H2* tests how the Mas' actual role performance relates to the BMs' expectations from the Mas' perspective. *H2* examines a possible discrepancy due to postulated hidden actions or hidden characteristics.

The results only partially support this hypothesis. We mostly find significant positive correlations between the actual role and the expected role. The results differ significantly between the two groups, MAS and HoMA. Especially for MAS, high levels of agreement are found. Only for HoMA the correspondences in the BP role and WD role are quite low.

The latter suggests that the postulated difference between role performance and role expectation may be more likely to occur among HoMA with respect to the BP role and WD role. In contrast, MAS see no such differences. We speculate that one reason for this may be the greater proximity of HoMA to BMs. This closeness might allow HoMA to better detect differences between expectation and reality, which were also evident in the results of *H1*.

Actual roles and the formation of expectations are likely to take place in a field of tension of three parties, i.e., BM, HoMA, and MAS influence each other in their roles and role expectations. It would be interesting to investigate these interactions in a triadic design. For the MAS, there is a high degree of correlation across all three roles (*H2a*, *H2b*, and *H2c*).

Due to the low correlation of roles and role expectations in the WD role, hidden actions and characteristics seem to have a stronger effect there, whereas they seem to be less pronounced in the SK role due to similarly high positive correlations. In this respect, the aspects of hidden actions and traits seem to depend on further role-specific factors, be it the fulfillment of desired tasks, the match of competencies and competency requirements, or other leadership-related aspects.

5.3. The third hypothesis: Business managers — Evidence for a fit between actual roles and expected roles

The results of the study confirm *H3*, which is based on isomorphism, and argue that there is coherence between what BMs expect as a role and what they see as the main tasks and actions of MAs. Thus, we find no intra-sender conflict. The intra-sender conflict can be described as follows. A sender's instructions and expectations are contradictory and mutually exclusive (the supervisor expects absolute obedience at one time, but then encourages criticism of his orders at another time). The MA carries out their BP role according to the BM's expectations from their point of view (*H3a*). MAs already fulfill the expectations of the BM.

The isomorphic view does explain the given result. However, if one looks at the context, it seems puzzling. The result of achieving business partner alignment could be seen as worth mentioning. However, this contradicts the announcement of the top management and the efforts of the MAs to see the MAs acting more in the role of BPs.

The question arises to what extent the BMs know or are aware that the MAs are already acting as BPs according to their expectations. Likely, the differentiated characteristics of business partnering measured by Fourné et al. (2018) do not match the BP understanding of the company.

Assuming a firm-specific, divergent interpretation of the business partner construct that influences both expectations and perceptions of roles, this result also likely points to the effects of BP concept implementation described in *H1*. Different interpretations of BP have consequences for implementation. This points to the need to clarify and communicate the BP concept between the stakeholders — top management, BM, and MA — and then to anchor it organizationally accordingly.

Interestingly, there is also a comparable level of correlation between the actual and the expected role for the SK (*H3b*) and a weaker level for the WD (*H3c*). That is, the highest correlation can be found for the BP, which supports also *H3d.*

Summarizing the results of the hypotheses (*H1* to *H3*) tests, the following picture emerges: BMs consistently have higher role expectations of MAs than MAs themselves (*H1*). However, this is not evident within the two groups: here, both BMs and MAs see a match between actual and expected roles (*H2* and *H3*). There is thus a tension that the two groups are not aware of.

5.4. The fourth hypothesis: Management accountants — Weak correlation between expected roles and self-perceived roles

The results of *H4* test show that there is a discrepancy between the self-perceived role of MAs and the role expected of them by BMs from their perspective (*H4*). These results suggest possible role conflicts among MAs. Some of the participants we interviewed separately believe that they cannot yet meet the demands of their BP role (participant comments from the survey). Several reasons can be cited for this: lack of skills, different personality traits, time constraints, or resource constraints. Insecurities can arise from such discrepancies, as the BP role is associated with greater prestige (Hiller et al., 2014), but the MA him/herself does not see him/herself as being able to fill the role.

MAs seem to have difficulty interpreting BMs' expectations correctly. It is possible that they perceive BMs as not needing decision support (Wolf & Heidlmayer, 2019), even though BP is communicated as a guiding principle. However, the same low correlation is found for the other roles, SK and WD, so that rather a pervasive discrepancy of perception and expectation of roles among MAs can be assumed.

5.5. The fifth hypothesis: Management accountants — Significant hierarchical differences in results about the actual role and self-perceived role

Finally, *H5* tests whether a self-perceived BP role matches the actual role as BP. The results show that HoMA have a strong match between self-perceived role and actual role as BP while MAS does not.

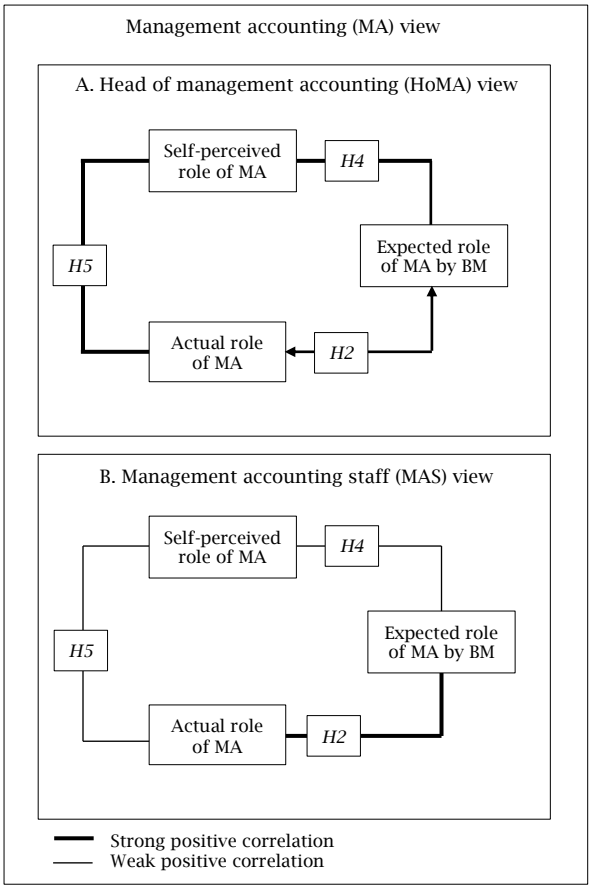
Such a discrepancy between actual and self-perceived role can trigger insecurity, fear, and stress in people. Role stress as a consequence represents a pattern of reactions that occur when MAS is faced with work demands that do not match their knowledge and skills and that exceed their ability to cope (Tubre & Collins, 2000).

HoMA on the contrary are aware of their role as BP and act accordingly. Hence, the results indicate a difference between actual role and self-perception stemming from hierarchical levels. This may lead to possible role conflicts between HoMA and MAS in that HoMA expect a BP role for MAS, triggered by the expectation of BM as well as their own, while MAS does not see themselves in such a role. It is also worth discussing whether a BP role might be more suitable for management levels in management accounting functions.

5.6. Significant differences in the findings of H2, H4, and H5 between heads of management accounting and management accounting staff

As already evident in the discussion of the hypotheses tests, different results emerge between HoMA and MAS that merit closer analysis. Figure 2 summarizes the results.

Figure 2. Differentiating heads of management accounting and management accountants



For HoMA, in contrast to MAS, there is a correspondence between actual role, BMs' presumed expectations of their role, and their self-perceived role. For MAS, a clear correlation is only found for the actual role and the role expected by the BMs from their perspective (*H2*). Otherwise, little correspondence is found (*H4*, *H5*). One reason for this could be that HoMA generally work more closely with BMs and are therefore more likely to assume the role of BP.

5.7. Potential role conflicts in role transition processes

In role theory, the mismatched self-image of the MAs can also be interpreted as an indication of an incongruity between identity and role (Wolf et al., 2020). Identity includes how the role occupant interprets and makes sense of a role. Further studies could investigate which aspects of identity (self-view of characteristics, experiences, motivations, goals, values, beliefs, internal norms and interaction styles (Ashworth et al., 2009) could be the cause of such incongruence. According to the authors, incongruity can also represent a transitional phenomenon in role change until the corresponding adaptation processes have taken place. Due to its stronger occurrence for MAs, a management task for HoMA arises. According to Wolf et al. (2020), the continuous rethinking of identities by MAs is necessary and such processes depend on the competencies and characteristics of their managers, here the HoMA (Wolf et al., 2020). It is unclear to what extent HoMA are aware of this and actively address it. One area for further research concerns the different phases of externally initiated role changes and the path of internal adaptation processes of participants.

Role conflicts in change processes have two different facets. On the one hand, the emotional consequences, for example, high work pressure and low job satisfaction, can lead to temporary performance losses. On the other hand, role conflicts can also mobilize new energies, promote creativity and thus drive change. Whether this includes further development of existing roles remains open.

6. CONCLUSION

We see three avenues for further research. Firstly, as indicated actual roles, expectations and perceptions seem to differ between different management levels in a management accounting function. To understand the reasons, outcomes and consequences of such differences need further research.

Secondly, some mismatches between the above-mentioned role aspects might be transient phenomena in a process of transition from a more classical role to a BP role. Longitudinal studies on role change combined with cultural change might shed additional light on this and allow us to see if such role conflicts are only temporary.

Thirdly, digitization affects the role of MA in general. To date it is unclear what consequences on identity, roles and tasks are to be expected. Further research is needed to gain insight into role changes due to digitization. Are management accountants replaced by data scientists or will it be enrichment in tasks only?

Several limitations of the study at hand are worth noting. First, we used a predefined set of items to measure the actual role according to Fourné et al. (2018). They did not include aspects of digitization and assumed that role types will not change significantly. However, different definitions of roles might lead to different results.

Second, the results of the study are limited to one case company and the given sample size. For generalizing the results more evidence is needed. Especially, a triadic study design that integrates BM, HoMA, and MAs is worth pursuing.

About the manifestation of role expectations in the MA, the question arises as to what other company-specific or individual factors are at work that has not been observed in this study. Karlsson et al. (2019) point to other drivers of the BP ideal that can also shape expectations, such as role descriptions, different management levels, the modernity of information technology, and also individual preferences of MAs with regard to autonomy and influence.

Despite these limitations, the study at hand provides insight into MAs' roles by showing empirical evidence of the relationships between role expectations and perceptions from operational practice. In doing so, it elaborates on the configuration of roles, and differences in the hierarchical placement of MAs in the management accounting function and an organization as a whole.

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APPENDIX. ITEMS FOR ROLE MEASUREMENT

Please indicate how frequently you typically engage in the following activities within your current position:
1 — "never", 2 — "every six months", 3 — "every three months", 4 — "every month", 5 — "every two weeks", 6 — "every week", 7 — "multiple times per week".

Item	***Business partner***	
BP9	I work on scenario analyses to support strategic planning purposes.	
BP13	I discuss future business perspectives with management.	
BP17	I conduct sensitivity analyses on key drivers of business performance.	
BP22	I pro-actively explain to management how changes in non-financial performance measures affect profitability.	
BP26	I discuss strategic issues with senior management.	
BP28	I join steering committees to present financial implications of strategic options.	
Item	***Watchdog***	
WD3	I analyze in what organizational units performance targets were not achieved.	
WD4	I analyze variances between actual and planned performance of organizational units for control purposes.	
WD18	I inform accountable managers and their superiors together about variances from budgeted targets.	
WD22	I highlight negative budget variances within official reports to ensure a higher level managers notice them.	
WD23	I revise budget targets to ensure they serve as an up-to-date basis for control purposes.	
Item	***Scorekeeper***	
SK2	I instruct others how to enter data correctly within the internal financial systems.	
SK3	I check whether interfaces between data systems work correctly.	
SK4	I cooperate with colleagues from the financial accounting department to clarify data entry errors in financial systems.	
SK17	I update cost center plans within the financial systems of the organization.	
SK18	I correct data entry errors within the financial systems of the organization.	
SK22	I collect data on operational processes that shall be included in periodic reports.	

Source: Fourné et al. (2018, p. 185).