The Contribution Effect of Management Accountant's Competence and Management Accounting Practices on Financial Performance of Manufacturing Firms

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Abstract

This study sought to establish the contribution effect of management accountant's competence and management accounting practices on the financial performance of manufacturing firms, using Mbarara district in Uganda as the study setting. Field data were collected through a questionnaire survey from forty-six manufacturing firms operating in Mbarara district. A hierarchical regression analysis was performed to establish the contribution effect of the study variables. The results revealed that management accountant's competence has a greater contribution effect (R2 change =43%) compared to management accounting practices (R2 change =5%). The results imply that management accountant's competence matter a lot in explaining variations in the financial performance of manufacturing firms. The novelty of this study lies in the fact that past studies investigating the relationship between management accounting practices and financial performance have often missed the reality of the management accountant's competence.

Keywords: Management accountant's competence, management accounting practices, financial performance, manufacturing firms

Introduction

For over several decades up-to-date, the financial performance of firms has continued to attract the keen interest of academicians and policymakers alike, because of its implication on the financial health and ultimate survival of firms (Madhuka & Bandara, 2016; Orobia et al., 2020; Kamukama et al., 2017). Consistent reports on the poor financial performance of firms are common, yet factors explaining this continue to be mixed and inconclusive, more so among manufacturing firms (see Akisimire et al., 2016; Abdel-Maksoud et al., 2008; Karakaya, 2007; Kamau, 2014; Macinati & Anessi-Pessina, 2014). Management accounting literature report competence of management accountant as one of the explanatory factors (Abdel-Maksoud et al., 2012; Madhuka & Bandara, 2016; Wu et al., 2007). Previously, management accountants have been seen as "beancounters", counting, comparing, recording, and reporting financial information for internal decision making were the traditional roles of management accountants in the past to rely upon (Ahid & Augustine, 2012; Baldvinsdottir et al., 2008; Robalo & Costa, 2017; UKEssays, 2018). Today, management accountants play an important role in creating and adding value to organizations by managing resources, activities, and people to fulfill the organizations' objectives (Hilton, 2009; Ahid & Augustine, 2012). They play a role in taking and negotiating appropriate strategic moves. They help managers determine their most important

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customers, substitute products in the market, critical capability, and cash adequacy to fund a strategy (Horngren et al., 2009). In order to perform these roles, management accountants need to possess such skills as financial and managerial accounting knowledge, analytical skills, verbal, and written skills, capability to work in a group and expertise in how a business functions (Horngren et al., 2009; Ahid & Augustine, 2012). A few studies find support for the relationship between management accountants' competence and financial performance (De Loo et al., 2011; Goretzk, 2011; Intakhan, 2018).

Some studies have found a significant relationship between Management Accounting Practices (MAPs) and the financial performance of firms (Mwangi, 2014; Madhuka & Bandara, 2016). MAPs are the tools/techniques management accountants use to provide organizations with relevant information for the effective and efficient use and management of resources so as to add value to customers and shareholders (Abdel-Maksoud et al., 2012; Wu et al., 2007; Mwangi, 2014; Madhuka & Bandara, 2016). Examples include the traditional techniques such as Standard Costing, Variance Analysis, Return on Investment (ROI), Budgeting, and Cost-Benefit Analysis (CBA) (Johnson & Kaplan, 1987). At the same time, the contemporary techniques include Activity-Based Management (ABM), Activity-Based Costing (ABC), the Balanced Scorecard (BSC), Value Chain Analysis (VCA), and benchmarking (Wu et al., 2007). MAPs help organizations to plan, direct and control operating costs and to achieve profitability. If organizations are to survive in the competitive, ever-changing world, characterised by rapid technological change, globalisation, and dynamic customer needs, sound MAPs is imperative (Abdel-Maksoud et al., 2012; Mwangi, 2014; Madhuka & Bandara, 2016).

It is worth noting that, previous studies that have investigated the relationship between MAPs and financial performance have tended to assume the role of the actors behind the MAPs (Mwangi, 2014; Madhuka & Bandara, 2016). Budgeting, variance analysis and break-even analysis and other MAPs are not possible if the actors involved do not possess the necessary knowledge, skills, and abilities. It is a fact that when management accountants possess the basic knowledge on planning, directing, and controlling operating costs, they will help provide organizations with relevant information for the effective and efficient use and management of resources, which, in turn, will achieve profitability (Abdel-Maksoud et al., 2012; Madhuka & Bandara, 2016). In this study, we examine the general knowledge, skills, and abilities related to interaction and adaptability as opposed to the specific competences related to management accounting. We argue that uptake of MAPs is enhanced when the management accountant is able to identify with the ever-changing stakeholder needs and general changes in the environment.

This study contributes to the existing body of knowledge in the following ways. *First,* the results expand existing knowledge on the extent to which management accountant's competence, and MAPs affect financial performance where literature is scarce. Early scholars investigating management accountant's competence, MAPs and financial performance have tested the predictors in separate studies (Abdel-Maksoud et al., 2008; Karakaya, 2007; Kamau, 2014; Macinati & Anessi-Pessina, 2014). Some have considered the role of management accountants in the usage of MAPs leaving out the effect on financial performance (Abdel-Kader & Luther, 2006; Ahmad & Leftesi, 2014; El-Ebaishi et al., 2003; Ghasemi et al., 2015; Pavlatos & Paggios, 2009; Van der Steen, 2011). In this study, we provide empirical evidence on the contribution effect of management accountant's competence and management accounting practices on

manufacturing firms' financial performance in Mbarara district, Uganda's second-largest commercial district after the capital city Kampala. The study results showed that management accountant's competence has a greater contribution effect (R^2 change =43%) compared to management accounting practices (R^2 change =5%).

Second, perception-based studies that employ questionnaires to examine the relationship between management accountant's competence, MAPs, and financial performance in one study are scarce. It has been argued by previous scholars (see Bananuka, 2020) that perception-based studies incorporate respondent's opinions and position on the subject matter. For instance, in the uptake of MAPs, accountants/ managers who may not have been aware of certain activities that are ideal for improving operations become aware of such activities. This study utilizes opinions solicited from management accountants through a self-report approach. It is believed that their perceptions on the study topic are relevant for improving their organization's operations. *Third,* the contribution effect of management accountant's competence and MAPs on financial performance is supported by contingency theory (Otley, 1980), whose main argument is that the organization performance will be enhanced if a good fit happens between the management accounting and control system and the contextual variables (such as competence of staff). The rest of the paper is organized as follows. The next section covers the theoretical foundation and measuring financial performance. This is followed by empirical literature on the relationship between the study variables. The research methods, results, and discussion then follow respectively. The study conclusions and implications are presented last.

Theoretical Foundation

This study is founded on the contingency theory of management accounting. The main argument of the theory is that an organization's performance will be enhanced if a good fit happens between the management accounting and control system and the contextual variables (such as staff competence, firm size). The theory is based on the assumption that no universally appropriate management accounting system can be applied for all organizations in all circumstances (Otley, 1980; Oates, 2015). This means that the form or design of the management accounting system applied in an organization should match the situations and conditions in which the organization is operating, to enhance performance. This study hinges on the interaction approach of the contingency theory which focuses on the context-structure-performance relationship. The approach supposes that organization performance is dependent on the context (contingent variable such as business strategy, perceived environmental uncertainty, firm size, etc.) and the structure (management accounting and control systems). We argue that uptake of such MAPs as budgeting, variance analysis and break-even analysis, and other MAPs is not possible if the actors behind do not possess the necessary competence.

Second, the operating environment is dynamic and volatile (Byrne & Pierce, 2007; Cai & Luo, 2020; Lachmann et al., 2013; Pavlatos & Kostakis, 2015). For instance, the operating environment is characterized by rapid advancement in technology, market competition, change in customers' tastes and preferences, and rapid changes in stakeholder demands. This means that management accountants must possess competences in interaction and adaptability, to be in a position to identify with the ever-changing stakeholder needs and general changes in the environment. This will enable them to apply the appropriate MAPs to enhance the financial performance of the firms.

Measuring Financial Performance

Financial performance is a general measure of a firm's overall financial health over a given period (Pandey, 2006). It measures a firm's ability to achieve planned financial results as measured against its intended outputs (Egbunike & Okereteoki, 2018; Mutende et al., 2017). Financial performance can be measured objectively using absolute values (e.g. sales, profit) or ratios from financial statements (e.g. return on equity (ROE), return on assets (ROA), return on capital (ROC), return on sales (ROS), net profit margin, operating margin, Tobin's $q-1$, the natural logarithm of Tobin's q) (Gilchris, 2013). Each financial ratio reflects the behaviour and evaluation of various stakeholders with different interests (Konar & Cohen, 2001; Nakao et al., 2007). For example, ROE includes the stockholders' evaluation and performance of the goods market. ROA, ROI, and ROC reflect not only the equity capital contributed by stockholders but also borrowed capital provided by creditors and investors.

ROS indicates the market evaluation by consumers and trading partners. Tobin's $q-1$ and the natural logarithm of Tobin's q are interpreted as the value of the firms' intangible assets. Financial performance can also be measured subjectively using a growth rate over several years (Hansen et al., 2006; Konar & Cohen, 2001; Nakao et al., 2007). Furthermore, financial performance compares similar firms across the same industry or compare industries or sectors in aggregation. Earlier scholars like Dess and Robinson Jr. (1984) state that subjective performance measures are the most appropriate for examining relative performance within an industry. In this study, financial performance was measured using self-rated subjective scales. Specifically, five items capturing perceived growth rate of sales amount, net profits, gross profits, cost of production, and expenditures in the last three years were used. This approach has been successfully used in the Ugandan context by Tumwine et al. (2015), Akisimire et al. (2016) and Kamukama et al. (2017).

Management Accountant's Competence and Management Accounting Practice

According to the Institute of Management of Accountants (IMA, 2008), a management accountant is that person charged with the responsibility of partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy. Management accountants play an important role in creating and adding value to organizations by managing resources, activities, and people to fulfil the organizations' objectives (Hilton, 2009; Ahid & Augustine, 2012). They play a role in taking and negotiating appropriate strategic moves. They help managers determine their most important customers, substitute products in the market, critical capability, and cash adequacy to fund a strategy (Horngren et al., 2009). In short, they are creators, reporters, and preservers of organization value (CIMA, 2011). However, to perform these roles, management accountants must possess such skills as financial and managerial accounting knowledge, analytical skills, verbal and written skills, capability to work in a group, and expertise in how business functions (Horngren et al., 2009; Abbasi, 2013; Ahid & Augustine, 2012).

MAPs, on the other hand, are the tools/techniques management accountants use to provide organizations with relevant information for the effective and efficient use and management of resources to add value to customers and shareholders (Abdel-Maksoud et al., 2012; Wu et al.,

2007; Mwangi, 2014; Madhuka & Bandara, 2016). This means that, for the successful employment of MAPs, management accountants must possess the necessary knowledge, skills, and abilities (Cheng et al., 2005; Savory, 2006; Abbasi, 2013). In this study, we examine the general knowledge, skills, and abilities related to interaction and adaptability as opposed to the specific competences related to management accounting. We argue that uptake of MAPs is enhanced when the management accountant is in a position to identify with the ever-changing stakeholder needs and general changes in the environment. Competent management accountants can help managers make the decisions that they need to make within the company to help the company remain competitive and dominant in the local and world markets. Studies that have tested the relationship between management accountant's competence and MAPs are scarce. Nonetheless, based on the foregone discussion, we hypothesize that:

H_1: Management accountant's competence and MAPs are positively correlated.

Management Accountant's Competence and Financial Performance

Traditionally, management accountants are seen as "beancounters", counting, comparing, recording; and reporting financial information for internal decision making were the traditional roles of management accountants in the past rely (Baldvinsdottir et al., 2008; Robalo & Costa, 2017; UKEssays, 2018). According to Ahid and Augustine (2012), management accountants add value to their organizations by helping top management in "*planning* (setting goals and objectives for the organization, and determining the way to fulfil them, by selecting specific action implementations), *directing* (overseeing the company's day-to-day operations and monitoring the implementation of the plans to achieve the organizational goals), *controlling* (evaluating the results of business operations against the plans and making adjustments to keep the company pressing towards its goals) and *decision making*." (pg.46). These roles call for appropriate competences. A splendid financial performance reflects management effectiveness and efficiency in making use of the company's resources and is often expressed in terms of growth of sales, profits, employment, or stock prices (Naser & Mokhtar, 2004).

Management competences drive financial performance through their influence on adopting management best practices (Jiambalvo, 2015). Management competences also enable the firm to transform resources into value offerings, increasing the firm's financial performance (Doole et al., 2006). Vorhies, Morgan, and Autry (2009) also add that it is not enough to possess resources and capabilities; how capabilities are deployed is more critical for creating and sustaining competitive advantage than their mere possession. It is, therefore, the mandate of management on how to bring about financial performance (Henry et al., 2005). This analysis provides support for this relationship between management accountant's competence and financial performance. In that, as creators, reporters, and preservers of firm value, the firm's profitability will depend on the management accountant's knowledge, skills, and abilities to drive the firm to success. Thus the hypothesis that:

H_2: Management accountant's competence has a contribution effect on the financial performance of manufacturing firms.

Management Accounting Practice and Financial Performance

MAPs refer to various methods especially for manufacturing firms to support the organization's infrastructure and management accounting processes (Horngren et al., 2009; Wu et al., 2007). Traditional MAPs such as budgeting, costing, and profitability analysis mainly focus on internal organizational issues and are financially oriented (Ahmad, 2014; Ahmad & Zabri, 2015). While, currently developed practices such as competitor cost assessment, life cycle costing and strategic pricing, take into account financial and non-financial information focusing on a more strategic orientation (Horngren et al., 2009; Nuhu et al., 2017; Wu et al., 2007). Scholars continue to report that the adoption of MAPs help management in planning and forecasting to reduce costs and unnecessary spending and also to increase profits so that the company fulfills its corporate vision and mission and financial viability (Abdel-Maksoud et al., 2008; Abdel-Kader & Wadongo, 2011; Karakaya, 2007; Kamau, 2014; Macinati & Anessi-Pessina, 2014; Mathenge, 2012; Uyar, 2010). For instance, Henri (2006) investigated the direct association between the usage of a management control system and organizational performance. In his study, Henri implicitly assumed that the usage of management accounting information for decision-making has a positive effect on organizational performance. Bransah (2019) investigated the effects of management accounting practices on the financial performance of manufacturing companies in Ghana. The study findings showed that information for decision making practice was the most highly used MAPs amongst the manufacturing companies in Ghana followed by strategic analysis, budgeting, performance evaluation, costing, size, and leverage respectively, and that these MAPs were positively and significantly associated with the profitability of the firms studied. Based on the findings from the previous studies, we hypothesize that:

> *H_3. Management accounting practices have a contribution effect on the financial performance of manufacturing firms.*

Control Variables

Given that this study sought to test the contribution effect of management accountant's competence and MAPs on financial performance, it was necessary to control for the confounding factors such as firm age and size. A confounding variable is a third unmeasured variable that influences both the supposed cause and the supposed effect (Field, 2009). Accounting for confounding variables ensures the internal validity of the study, and so failure to control for confounding variables could lead to misleadingly rejecting the hypothesis when it should be accepted (Field, 2009, Bartov et al., 2000). Previous studies have found significant associations between firm age, size, and financial performance (Tumwine et al., 2015; Akisimire et al., 2016; Coad et al., 2013; Dogan, 2013; Kamukama et al., 2017).

Research Methodology

Research design, population, and sample

This study employed a cross-sectional survey questionnaire design using forty-six (46) manufacturing firms located in Mbarara district. Mbarara is the second-largest commercial town of Uganda, second to the capital city Kampala, moreover with the highest number of manufacturing business establishments in western Uganda (UBOS, 2017). The unit of inquiry was the individual, who happened to be the management accountant. This paper is part of a bigger project that focused on management accounting practices and financial performance in manufacturing firms, with a special focus on the role of the management accountant; hence the

choice of focusing on the management accountant as the key respondent. The demographic characteristics of the respondents are presented in Table 1.

Table 1: Background information on the respondents

Category Individual characteristics (n=46)	Frequency	Percent
Gender		
Male	24	53
Female	22	47
Age bracket		
21-30	20	43
31-40	16	35
41-50	7	15
Above 50	3	7
Education level		
Primary certificate	3	7
Secondary certificate	5	11
College certificate	7	15
Diploma	11	23
Bachelors	17	36
Others	3	7

Source: Primary data

The descriptive statistics in Table 1 show that majority of the respondents were males (53%) and in the age bracket between 21-30 years (42%), followed by 31-40 years (36%). Mainly, the majority of respondents were between 29-40years. It is interesting to note that most of the accountants were in their young age. These results concur with the Uganda Bureau of Statistics (UBOS) report (2019) that showed that the majority of the population lies in the age bracket of 18-35 years. Further still, as indicated in Table 2 below, the firms surveyed had less than 15 employees, so picking one respondent per firm was sufficient. Additionally, the majority of the management accountants in this study were bachelor holders (36%). This implies that the data was collected from knowledgeable people with adequate understanding of the study concepts.

Table 2: Firm characteristics

Category Firm characteristics (n=46)	Frequency	Percent
Firm age		
Less than 2years	8	17
2-5years	12	27
6-10years	9	20
more than 10years	17	36
Ownership type		
Sole Proprietorship	18	39
Partnership	14	30
Co-operative	4	9
Limited Liability Co	10	22

No. of employees		
Less than 15	16	34
16-30	10	23
31-45	6	14
46-50	4	12
51 and above	8	18
Type of business		
Wood products (carpentry)	8	17
Food processing	10	22
Beverages and soft Drinks	13	28
Bakery products (confectionary)	8	17
Leather and textiles	1	2
Metal Fabrication	6	13

The descriptive statistics in Table 2 show that majority of the participating firms were more than 10years old (36%), followed by 2-5years old (27%). The western region is a cattle keeping region and known for milk production. As reflected in the business results, the, majority were beverage and soft drink companies (28%), followed by food processing companies (22%). Such companies have been around for quite some time, and so the results are not surprising. In regards to ownership, the majority of the participating firms were sole proprietorship type (39%), moreover employing less than 30 workers (26, 57%). Such businesses tend to have their operations revolving around the owner/manager (Orobia et al., 2013). Thus, considering a staff in the management accountant's position was sufficient to control for any bias that may have arisen from firm owner responses.

Data collection tool

Data were collected using a closed-ended survey questionnaire which comprised of four sections. Section A covered the demographic factors. Section B covered items relating to management accountant's competence. Section C covered items relating to management accounting practices. While, Section D covered items relating to financial performance. The continuous variables were measured using the four-point scale to allow respondents to be more thoughtful, precise and reduce response bias. Eliminating the middle-point provided a better measure of the intensity of participants' attitudes or opinions (Busch, 1993; Reid, 1990). Additionally, this study examined management accountant's competence and management accounting practices; thus, the respondents were expected to make clear choices from the alternative responses, hence rendering the middle category irrelevant. Notably, all items used were derived from those developed and tested by previous scholars detailed as follows:

Management accountant's competence - a self-report approach was used to measure general competence, general knowledge, skills and abilities related to interaction and adaptability. This was based on the notion that when an individual is able to interact smoothly with others, is flexible and can quickly adapt to changes in the environment. This change can easily be translated into his/her work performance, adopting MAPs. We particularly adapted items of interaction and adaptability for the communicative competencies from Wiemann (1997) and Rubin and Martin (1994). The items were anchored on a 4 point scale ranging from "Not at all" (1) to "A great deal

Management accounting practices (MAPs) – was conceptualized as the tools and techniques used to provide organizations with relevant information for the effective and efficient use and management of resources to add value to customers and shareholders (Abdel-Maksoud et al., 2012; Horngren et al., 2006; Wu et al., 2007). As such, MAPs was measured in terms of budgeting, costing systems and decision support system anchored on a 4 point Likert scale ranging from 1 =Never, 2 =Rarely, 3 = Often and 4 = Always.

Financial performance – Subjective measures were used in this study given the challenges in accessing the firms' financial statements. Particularly, financial performance was measured in terms of perceived growth in sales, profits, and perceived decline in production costs, and expenditures of the last three year period (Carreta & Farina, 2010; Akisimire et al., 2016), anchored on a 4 point scale ranging from *(1= "Less than 5%", 2 = "5 - 8%", 3= "8 - 11%", 4="Over 11%").*

Validity and reliability

Convergent validity was tested by running a principal component factor analysis with varimax. However, before performing the factor analysis, the suitability of the data for factor analysis was assessed based on sample size adequacy, the Keiser – Meyer – Olkin (KMO) and Bartlett tests. The results are presented in Table 3.

Table 3: KMO and Bartlett test results

Variables	KMO	Barlett test's test of sphericity approx. X^2	df	Sig.	No. of items	Variance extracted
Mgt acct. competence	.894	608.265	78	.000	14	60.64
MAPs	.866	809.250	105	.000	15	58.24
Financial performance	.875	615.767	28	.000	08	59.82

The study variable results in Table 3 show that the KMO values are all above the recommended cut off of 0.7. The Bartlett's test of sphericity in all scales also reached statistical significance ($p \leq .001$ for each scale). It implies that the data was suitable for factor analysis. Convergent validity was established by examining the factors extracted, the factor loadings and eigen values. The recommended cut-off for factor loadings of .5 and the eigen values extracted should be one and above (Hair et al., 2010). The results revealed as follows. For management accountant's competence, general knowledge, skills and abilities in interaction and adaptability were tested. 2 factors were extracted with item loadings above .5. These were labeled interaction (43.95%) and adaptability (16.69%). For MAPs, 3 factors were extracted labeled information decision support (38.93%), budgeting technique (11.08%) and costing technique (8.45%).

Reliability was assessed by running the Cronbach's alpha coefficient test, and the results were as follows: .952 for management accountant's competence, .913 for MAPs and .909 for financial performance. The rule of thumb is that the reliability estimate should be 0.7 or higher (Hair et al., 2010), thus, the results confirm the reliability of the instrument.

Model

Three regression equations were generated to define the models used in investigating the contribution effect of management accountant's competence and MAPs on financial performance. The first regression equation for Model 1 related to the control variables of firm AGE and firm SIZE (no. of employees). The second regression equation for Model 2 is related to the addition of management accountant's competence whereas the equation for Model 3, the main model, relates to the introduction of MAPs to all the variables in Model 2. The regression equations for the models are specified as below:

Model 1: $FP = \beta_0 + \beta_1 Age + \beta_2 Size + \varepsilon$ ……. (i)
Model 2: $FP = \beta_0 + \beta_1 Age + \beta_2 Size + \beta_3 MC + \varepsilon$ …….. (ii)
Model 3: $FP = \beta_0 + \beta_1 Age + \beta_2 Size + \beta_3 MC + \beta_4 MAPs + \varepsilon$ …….(iii)

Where:
FP = *Financial performance*
β_0 *is a constant*
$\beta_1 Age$ *= the standardised beta coefficient of business age*
$\beta_2 Size$ *= the standardised beta coefficient of No. of employees*
$\beta_3 MC$ *= the standardised beta coefficient of management accountant's competence*
$\beta_4 MAPs$ *= the standardised beta coefficient of management accounting practices*
ε *= error term*

Results

Zero order correlation analysis

A zero order correlation analysis was performed to establish the associations between management accountant's competence, MAPs and financial performance. The results are presented in Table 4.

Table 4: Zero order correlation results

Variables	**1**	**2**	**3**	**4**	**5**
Firm Age (1)	1				
Firm size (No. Employees) (2)	.598**	1			
MAC-Competence (3	.300**	.403**	1		
MAPs (4)	.411**	.493**	**.709****	1	
Fin. Performance (5)	.241**	.286**	**.714****	**.665****	1

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

Results in Table 4 reveal that the control variables firm age and firm size are positively and significantly correlated with the financial performance of manufacturing firms (r=.241, p<. 05 and r=.286, p<.05 respectively). This means that positive changes in firm age and size are associated with positive changes in financial performance. The results further reveal a positive and significant relationship between management accountant's competence and MAPs (r=.709, p<.05); between management accountant's competence and financial performance (r=.741,

p<.05) and between MAPs and financial performance (r=.665, p<.05). The results confirm the data linearity assumption required to run regression analysis.

Hierarchical regression analysis

A hierarchical regression analysis was performed to ascertain the contribution effect of management accountants' competence and MAPs on manufacturing firms' financial performance, while controlling for firm age and firm size. The results are presented in Table 5.

Table 5. Hierarchical regression results (beta coefficients)

Details	Model 1	Model 2	Model 3	Tolerance value	VIF
Control variables					
Firm age	.117	.042	-.005	0.620	1.613
No. of full time employees	.215*	-.031	-.090	0.567	1.764
Independent variables					
Management accountant's competence		.722**	.515**	0.495	2.020
Management accounting practices			.347**	0.437	2.288
Model summary					
R^2	.090	.523	.576		
Adj R^2	.078	.508	.561		
R^2 change	-	.433	.052		
F-change	-	115.258	15.580		
Sig. F-change	-	.000	.000		

**p=<.05, **p<.001*

The results in Table 5 show that in *Model 1*, whereas firm size (no. of employees) was a significant predictor of financial performance, firm age was not. *Model 2* shows that the addition of management accountant's competence to the equation contributes an extra 43.3% variance explained by the model ($R^2\Delta$ = .433; sig. fΔ=.000). The results also revealed management accountant's competence as a significant predictor of financial performance (beta= .722; *p*=000). Thus, the results offer support to hypothesis 2 (H_2). It can be noted that the addition of management accountant's competence to the equation in Model 2 renders the control variables firm age and size insignificant in explaining financial performance in manufacturing firms in Mbarara district. *Model 3* shows that the addition of MAPs to the equation contributes an extra 5% of the variance explained in financial performance. Further, the strength of the relationship between management accountant's competence and financial performance reduced but remained positive and significant (beta =.515, *p*=.000). It was established that the relationship between MAPs and financial performance is positive and significant; thus the results offer support to hypothesis 3 (H_3). *Lastly*, the variables entered in the overall model altogether explain 56.1% (Adj. R^2=.561) of the variance in financial performance, implying that the remaining 43.9% is explained by other factors not considered in this study. It can be noted that in the presence of MAPs, management accountant's competence is the strongest and significant predictor of financial performance. Overall, all the study hypotheses were supported.

Discussion

According to the present results, the extent of contribution effect of management accountant's competence and MAPs on financial performance in manufacturing firms is now known. Two things emerge. One, both management accountant's competence and MAPs are significant predictors of financial performance. Two, when management accountants' competence and MAPs are in play, the variations in financial performance are greatly caused by the management accountant's competence. From the management accounting perspective, the present results mean that if manufacturing firms are going to experience better financial performance, the management accountant's competence must be emphasized. Management accountants play an important role in creating and adding value to organizations by managing resources, activities and people to fulfill the organizations' objectives (Hilton, 2009; Ahid & Augustine, 2012). They help managers determine their most important customers, substitute products in the market, critical capability, and cash adequacy to fund a strategy (Horngren et al., 2009). Simply put, they are creators, reporters and preservers of organization value (CIMA, 2011). However, in order to perform these roles, management accountants must possess such skills as financial and managerial accounting knowledge, analytical skills, verbal and written skills, capability to work in a group and expertise in how a business functions (Horngren et al., 2009; Abbasi, 2013; Ahid & Augustine, 2012). Additionally, management accountants must possess the knowledge, skills and abilities to identify changing stakeholder needs and general changes in the environment and incorporate this into the management systems to enhance the firm's financial performance (Abbasi, 2013; Jiambalvo, 2015).

Our findings are consistent with earlier scholars such as Naser and Mokhtar (2004), Doole et al. (2006) and Vorhies et al. (2009), who reported that management competences enable the firm to transform resources into value offerings, hence increasing the firm's financial performance. In a study by Abbasi (2013), the author found that management accountants with competences in information technology, planning, coordination, evaluation, collaborative work, other human relationships in professional ethics, knowledge of accounting skills and communication skills, translated to better firm performance. Similarly, Jiambalvo (2015), report that management competencies drive financial performance through their influence on the adopting management best practices. There is a support that a good financial performance is a reflection of management effectiveness and efficiency in making use of a company's resources, and is often expressed in terms of growth of sales, profits, employment, or stock prices (Naser & Mokhtar, 2004). The study findings also support the contingency theory, which looks at certain influential factors that will assist management to decide on an appropriate management accounting practice. In this case, the influence factor is management accountant's competence.

Conclusion and Implications

This study sought to investigate the contribution effect of management accountant's competence and management accounting practices on the financial performance of manufacturing firms, using Mbarara district, Uganda, as the study setting. This was achieved through a questionnaire survey of 46 manufacturing firms representing a response rate of 84 per cent. From the results, both management accountant's competence and MAPs are significant predictors of financial performance to 57.6 per cent. However, management accountants' competence is a better predictor (R^2 =43.3 per cent; beta=.515) than MAPs (R^2=5 per cent; beta=.347). The results of this study have significant implications for academicians, practitioners and regulators. For

academicians, the study suggests that the competence of the individual behind the MAPs should not be assumed. For practitioners, the findings are essential in that, they need to emphasize the management accountants' competence if they are to see the adoption of MAPs translate into better financial performance. For regulators such as the accountancy bodies, the findings provide evidence emphasizing the importance of competence of management accountants.

Although this study makes significant contributions to the financial performance literature of manufacturing firms, it does not go without limitations. First, this study was limited to manufacturing firms in Uganda, and it is possible that the results may only be generalized to manufacturing firms in Uganda, moreover those located in Mbarara district. Secondly, we focused on the global management accountant's competence variable and did not test the dimensions. Future studies should test the effects of the individual elements of management accountant's competence to see where firms should lay emphasis to enhance financial performance. Thirdly, given that it is a cross-sectional study, changes over time cannot be assessed, and estimates of how quickly study measures might respond to any changes cannot be provided. This is likely because organizations change, as well as systems and circumstances surrounding them. Fourthly, this study employed a quantitative survey, and responses could have been limited to those statements in the questionnaire. These limitations provide avenues for further studies. For instance, future studies may replicate the study in other study setting to test the model's robustness; employ a longitudinal study to capture changes in attitudes and utilize a mixed methods approach.

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