

EFFECT OF ENVIRONMENTAL FACTORS ON MANAGEMENT ACCOUNTING THEORY IN NIGERIA

Adesewa Edoumiekumo (PhD)
Department of Accounting, Niger Delta University, Wilberforce Island, Bayelsa State
edoumiekumoadesewa@gmail.com

Warlice Joel Uche (Ph.D)
Directorate of Consultancy, Entrepreneurship, Research and Development (DOCERAD)
Niger Delta University, Wilberforce Island, Bayelsa State
Warlice_joe@yahoo.com

Abstract

This research examined the effects of environmental factors on management accounting theory in Nigeria (a case study of Bayelsa state). Simple random sampling technique was adopted. 300 respondents were randomly selected from the total population. The data used for this study were obtained from primary sources through the use of questionnaire. The data obtained were analysed with principal component analysis technique (PCA). Based on the empirical analysis, this study found out that market competition has a significant effect on management accounting in Bayelsa State. Also the result shows that score of customer influence have a significant effect on management accounting. Similarly the result shows that regulatory pressure has a significant effect on management practice. On the other hand, the result shows that social and moral responsibility has no significant effect on management accounting practice. This study concludes that customer influence, regulatory pressures and high environmental uncertainty among other are determining factors of management accounting theory are the most determining factors of management accounting theory

Keywords: Principal Component, Regulatory Pressures, Customer Influence, Market Competition, Social and Moral Responsibility

DOI: 10.7176/JAAS/82-06

Publication date: September 30th 2023

INTRODUCTION

Management accounting practice is termed as foresight for every organisation development. The system of accounting in comparing is a very important part in the organization structure. Management accounting makes companies to make best decision for optional performance and to maintain effective control over organization resources it helps in necessity methods and concepts which will enable organizations to survive in an uncertain and competitive environment in this global world. The influence of environmental factors on business operations increases by the day. This factors increment has made organization to include strategic management decision by reducing operational cost.

Rosmawati & Normah (2004) opined that analysis must go into steady innovation for them to remain in business in this global economy. This is to say they must follow the new trend of business strategy to remain in business because their economy is highly competitive. In 1998, March to be precise, the financial and management accounting Cost determination management planning and control, reduction of resource waste in business processes, and creation of value through effective resource use are the four evolutionary stages that the FMAC and the International Federation of Accounting have gone through. As a result, managerial accounting techniques play an important role. (MAP) are important because manage need timely relevant and useful information for

sustainability of his company going concern, in this present competitive global market ((MIA, 2017; Sunami, 2013). Management accounting practices is therefore an important tool for improvement of organisational performance and profitability (Sunami, 2013).

There is no difference from one industry to the other as for as management accounting practice is designed for a specific organisation in respect of size and otherwise. A reasonable number of small and median enterprise have embraced the practice of management accounting theory (Ahmed, & Letesi, 2014). However SMES are yet to adopt comprehensive MAPS due to the size of their firms. The intensiveness of competition in the market also plays a vital role to encourage companies to adopt management accounting practices. As it allow organizations to compete effectively in making better decisions (Ahmed, & Letesi, 2014).

LITERATURE REVIEW

Appropriate systems that will suite an organization depends on the environment or circumstances facing them. (Otley 1980) Environmental uncertainty affects production technology, strategy, and the size and power of consumers. The output of management accounting is not solely the result of the groundnut process, but rather the result of a slew of other factors. Changes and modifications are made in accordance with the extended environment, such as accounting. Changes in management accounting have inspired the development of approaches for responding to changes in the competitive environment as well as developments in organizational technology and practices.

These changes, according to Scapers (1990), are associated with evolution since they represent an extension of traditional management structures for the flow of information to managers, which helps them control and make decisions. Decision-making is aided by the concentration of data in a data warehouse, according to Simon (1979). The management accountant needs to use his initiative to create a good environment that will improve the results of outcome that will be satisfactory even before decision are made and implemented.

According to McLellan, (2014) the role of management accounting as a technique for decision making relies on the process of requiring data concerning acquisition of resources and its consumption, reporting of opportunities, identifying the best solutions that will improve managers decision. Management accounting assists rational managers make logical decision.

A manager cannot make a good decision if he does not know about the environment him on one factor of the environment. The theory of contingency states that no one theory can be used in all cases, meaning there is not only one way to lead or manager an organization. Donaldson, (2001) from the contingency perspective, the impact of best practices depends on the environment in which the organization operates. However as organisations so also their operations increases and this will definitely affects their environment through the use of management accounting practices.

Environmental factors that are factors that are within the environs of the organisation in the firm of strategy that are highly competitive, the way the organisation goes about structuring the different offices, enhanced production technology, quality of management and its efficiency (Suriami, 2013).

An organisation cannot operate for, or by its own without interference with its immediate environment from which it operates from. There is always a limit by the relationship with the external environment, which has an input on management accounting system (Tijani & Samira, 2017). Organisations must change strategies in order to penetrate the market to achieve better organisational efficiency and consistency (Ghosemi, 2015).

The level of sophistication of management accounting practice is based on two business factors which vary between these two categories. For any organisation to survive there is an intertwined relationship between the organisation and the environment using the tool (management accounting practice) to achieve its goal and aim. There is dependency of organisation in the environment. Managers are better informing themselves before any matter is decided in favour of the organisation to enhance their management performance which has a direct input

on the environment. Management accounting on its own has not developed any theory (Tijani & Samira, 2017). The ones that are used in Management Sciences are adopted from other science related disciplines.

Management techniques cannot stand the test of time in the sense that there is no universally suitable accounting system for all organisations in all circumstances. The different management tools or techniques which are highly represented are used based on the circumstance of the environment the business is operating from (Tijani & Samira, 2017). That is why from the development of cost and management accounting, it experienced limitations in the various approaches which were invented by the developers of this discipline. It has been observed that management accounting change seems to follow trend, in decision making, this encompasses the faucets of accounting, indicating product costing, budgeting, forecasting and various financial analysis. Management accounting system which is contingent in an organisation's effectiveness in developing a descriptive theory is known as the contingent theory. Job, cost accounting, inventory and price optimising system are different types of management systems which are used by organisations to make better based decisions (Tijani & Samira, 2017).

Management needs to get feedback information from customers about their products that mean they should be familiar with the products. As society changes, so also the techniques have to change to meet the latest trendy way of life for future profitability. That is only when management accounting can remain relevant in society. The theoretical review in management accounting had to include all these findings so as to adapt to changes for flexibility in management accounting system; this will bring about new techniques that will provide information that will improve strategic position of an organisation.

It was during this period that managers knew what they needed to know about the cost implications of operations. Simon (1959) found out that there was positive effect on the role of accounting information and their uses were identified.

There is no universally acceptable view concerning the origin and development of management accounting. Due to the limitations of the various systems, regarding the social state of man, studies turned to social systems theory to examine management accounting.

Management accounting originated when the need for information and how to utilise the economic resources during the industrial revolution in the United Kingdom (Edward, Anderson, & Chandler, 1995) Johnson and Kaplan (1977) are of the opinion that it was during the time of the railways and the telegraph in the United States. The third school of thought does not does not associate it with any period of time but as capital exploitation justification of structural inequality in society (Neimark & Tinker 1986).

Due to the nature of environmental circumstances, management accounting uses its techniques to further operate in organisation through theories which are adopted from other social science (Hosking & Mave 1988).

METHODOLOGY

Industrial enterprises have been identified as one of the strategic and essential sectors in management accounting by various researchers. We included both the industrial and service sectors in our sample of twenty enterprises in Yenagoa Local Government Areas, which serves as the main core of industrial activity in Bayelsa State, Nigeria.

3.1 Method of Data Collection

In order to collect the necessary data, we will adopt a questionnaire that focuses on a sample of companies that are characterized by diversification in terms of internal and external factors. The aim of this questionnaire is to determine that management accounting practices is directly related to these factors. 300 questionnaires were distributed to management staff and other staffs by direct contact and only 216 copies were finally completed and retained with a rate of 72%.

3.2 Data Analysis Technique

- i. To find the most determining elements, the principal component analysis technique (PCA) would be utilized. Pearson (1901) and Hotelling (1933) created principal component analysis (PCA), a statistical technique for data reduction. By providing a series of uncorrelated linear combinations of the variables that contain the majority of the variation, it aids in the reduction of the number of variables in a study. PCA's goal is to find unit-length linear combinations of the variables that have the most variance.
- ii. The information could be paired or unpaired. By pairing, we imply that the values in the two samples have a one-to-one correlation. If the two samples are X_1, X_2, \dots, X_n and Y_1, Y_2, \dots, Y_n , then X_i corresponds to Y_i . The difference $X_i - Y_i$ is commonly determined for paired samples. The sample sizes of the two samples in unpaired samples may or may not be equal.
- iii. The two samples' variances could be assumed to be equal or unequal.

Similarly, the effect size is a statistical test that compares the difference in two groups' means. Unlike p-values, which are used to determine the statistical significance of a finding, effect size measures are used to determine the magnitude of the effect.

RESULT AND DISCUSSION

Table 4.1: Determining factors of management accounting theory

Determining Factor	Mean Critical Value	Stand. Deviation	Observed Mean	Rank	Decision
Awareness of environmental factors in management accounting	3.05	1.0555	2.50	5 th	Agree
Internal and external factors are available	2.85	1.0564	2.50	7 th	Agree
Awareness of the benefits of environmental management practices	3.00	1.0587	2.50	6 th	Agree
Market competition	2.84	1.0283	2.50	8 th	Agree
High environmental uncertainty	3.22	0.7832	2.50	2 nd	Agree
Strategy for reducing wastage	3.14	0.7672	2.50	3 rd	Agree
Business line influence in creating values	3.09	0.9082	2.50	4 th	Agree
Conditions for effective environmental performance	3.14	0.8748	2.50	4 th	Agree
Type of affiliation and business size	3.25	0.8747	2.50	1 st	Agree

Source: Authors computation from field survey, 2020

The estimated mean values of the respective variables are all bigger than the observed mean values of 2.50, as shown in Table 4.1. As a result, the null hypothesis for each of the components is clearly rejected. Management accounting theory is determined by factors such as awareness of environmental factors in management accounting theory and practice, internal and external environmental factors, awareness of the benefits of environmental management practice, market competition, high environmental uncertainty, waste reduction strategies, business line influence in creating values, conditions for effective and type of affiliation, and business size.

Principal Component Analysis (PCA) was further used to fish out the most determining factors of management accounting theory. The result is reported in Table 4.2 below.

Table 4.2: Principal component result of the determining factors of management accounting theory

First Panel: Principal Components (Eigenvalues)									
Principal Component	Eigenvalues		Difference		Proportion		Cumulative %		
1	1.9634		0.2093		0.1569		0.2181		
2	1.7540		0.5136		0.1949		0.4130		
3	1.2404		0.2878		0.1378		0.5509		
4	0.9526		0.1629		0.1058		0.6567		
5	0.7897		0.0453		0.0877		0.7445		
6	0.7444		0.1273		0.0827		0.8272		
7	0.6172		0.1074		0.0686		0.8957		
8	0.5098		0.0813		0.0566		0.9524		
9	0.4285		-		0.0476		1.0000		
Number of comp 9									
Trace	9								
Rho	1.0000								
Second Panel: Principal components (eigenvectors)									
Variable	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6	Comp 7	Comp 8	Comp 9
Cust_Infl	0.3293	-0.0515	-0.3433	0.5439	-0.2402	0.6395	-0.0442	-0.0660	0.0475
Reg_Pres	0.3301	-0.3709	-0.1661	0.2959	-0.1653	-0.5387	0.5168	0.1450	-0.1808
Awareness	0.4255	-0.4074	-0.0546	-0.1764	0.3043	-0.1112	-0.1920	-0.3613	0.5887
Mark_Com	0.3996	-0.3756	0.1030	-0.4102	0.0642	0.2483	-0.2556	0.3366	-0.5252
St_Was	0.2463	0.2441	0.3531	0.5364	0.6049	-0.1400	-0.2118	0.0806	-0.1744
Hi_Ev_Unct	0.2584	0.1048	0.6659	-0.1066	-0.1211	0.3045	0.5311	0.0904	0.2643
Bus_Lin	0.3598	0.3163	0.1777	0.0124	-0.6100	-0.3379	-0.4795	0.0830	0.1250
Cond_Eff	0.3594	0.4504	-0.1817	-0.2647	0.0598	-0.0177	0.2257	-0.6065	-0.3771
Aff_Bus	0.2361	0.4235	-0.4563	-0.2188	0.2490	-0.0042	0.1448	0.5842	0.2907

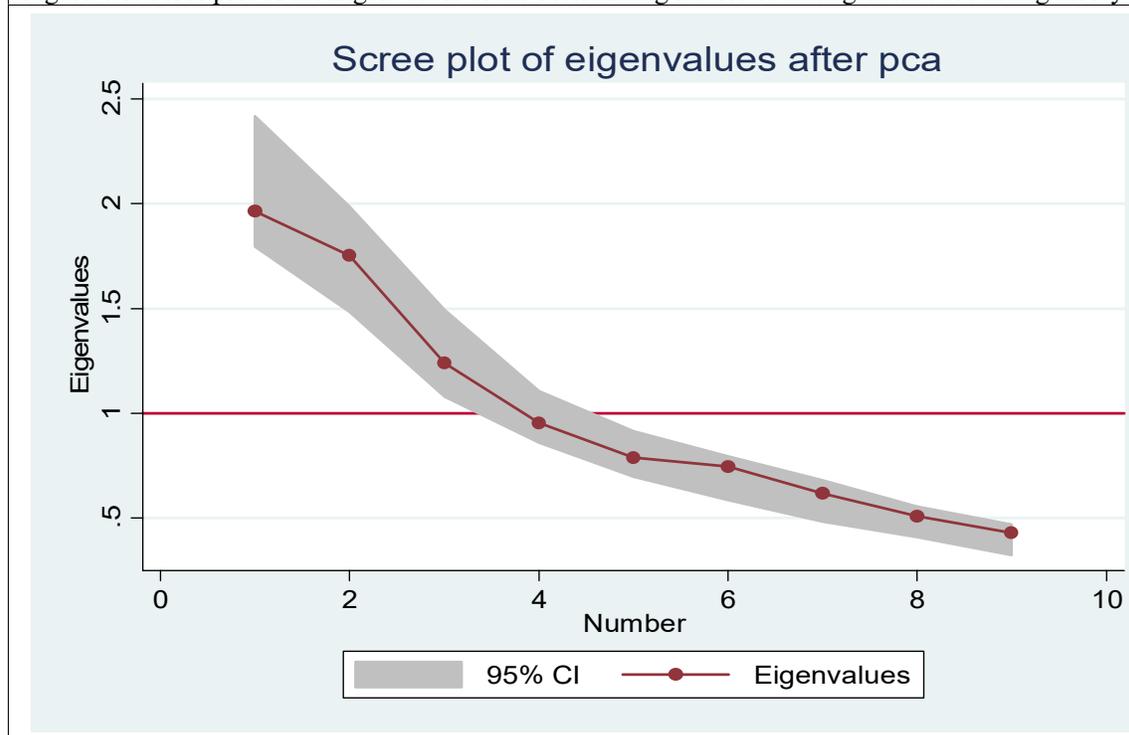
Source: Authors computation from field survey, 2020

The eigenvalues (the amount of variance preserved by each principal component) of the correlation matrix are listed in the first panel of Table 4.2b, and the corresponding eigenvectors are listed in the second panel. The total variance of the variables (the determining factors or variables of management accounting theory) studied is equal to the sum of the eigenvalues. The variables are standardized to have unit variance because the study is based on a correlation matrix, hence the total variance is 14.

The variances of the major components are the eigenvalues. With a variance of 1.96, the first main component explains 15.69% (1.96/14) of the overall variation. The variance of the second major component is 1.75, and it accounts for 19.49% (1.75/14) of the overall variation. With a variance of 1.24, the third principal component explains 13.78% (1.24/14) of the total variation. The fourth and fifth principal components, with variances of 0.95 and 0.78, explain 10.58 percent (0.95/14) and 8.77 percent (0.78/14) of the overall variation, respectively. The first five major components account for 74.45% of the variance. On the other hand, the first eight major components account for 95.24 percent of the total variance. The unexplained variances are all zero, and $Rho = 1.00$, as seen in the first panel.

The third principal component, with a variance of 1.24, explains 13.78 percent (1.24/14) of the total variation. With variances of 0.95 and 0.78, the fourth and fifth principal components, respectively, explain 10.58 percent (0.95/14) and 8.77 percent (0.78/14) of the overall variation. The variance is accounted for by the first five major components, which account for 74.45% of the variance. The first eight major components, on the other hand, account for 95.24 percent of the overall variation. As noted in the first panel, the unexplained variances are all zero, and $Rho = 1.00$. The Scree Plot is shown in Figure 4.1 below with a line across the y-axis with a heteroskedastic bootstrapping 95 per cent confidence interval.

Figure 4.1: Scree plot of the Eigenvalues of the determining factors of management accounting theory



Source: Author's plot from field survey, 2020

Figure 4.1 shows the 95 percent confidence interval as a dark image, while the red line shows the eigenvalues and the asterisk dots show the components. Only the first three components are above the 95 percent confidence interval line in Figure 4.1, indicating that only the first three components are significant. As a result, data on the first three major components is kept in order to determine the most important aspects of management accounting theory.

The most determining factors of management accounting theory are reported in Table 4.2c below. The correlation between a determining factor and a principal component is used as the coordinates of the variable on the principal component, which is the basis for selection of the most determining factors (Abdi & Williams, 2010) with determining variables with high correlation values are fished out as the most determining factors of management accounting theory.

Table 4.2b: The most determining factors of management accounting theory

Variable	Comp 1	Comp 2	Comp 3
Cust_Infl	0.7615	-0.0683	-0.3824
Reg_Pres	0.4625	-0.8912	-0.1850
Awareness	0.5962	-0.5395	-0.0608
Mark_Com	0.5600	-0.4975	0.1147
St_Was	0.3451	0.3232	0.3933
Hi_Ev_Unct	0.3621	0.1388	0.7417
Bus_Lin	0.5042	0.4189	0.1979
Cond_Eff	0.5036	0.5964	-0.2023
Aff_Bus	0.3309	0.5608	-0.5082

Note: The most determining factors of management accounting theory are highlighted (bolded). The cutoff point for which a variable is selected as one of the most determining factors is 0.7 – 0.9. This range in correlation analysis is defined as a very strong or high correlation (Ugbor, Ogbuabor & Ajaero, 2015). Therefore, it is appropriate to be the basis for which the decision for a most determining factor is reached.

Source: Authors computation from field survey, 2020

As shown in Table 4.2b, Customer influence (Cust_Infl), regulatory pressures (Reg Ptres) and high environmental uncertainty (Hi_En_Unct) are the variables with correlation coefficients falling within the range of 0.7 – 0.9. This means that customer influence, regulatory pressures and high environmental uncertainty among other determining factors of management accounting theory are the most determining factors of management accounting theory in Bayelsa state. While other internal and external environmental factors also have a strong correlation with management accounting theory.

4.4 Effect of Environmental Factors on Management Accounting Theory

The analysis was done using simple percentages, two sample t-test and test for effect sizes (based on the mean comparison). A simple percentage was used to examine the effect of effect of environmental factors on the respective management accounting theory. Two sample t-tests were employed to test the equality of mean of the responses within the two groups (management and other staffs) on the effect of environmental factors on the respective management accounting theory. The effect sizes (based on the mean comparison), on the other hand, was used to determine the magnitude of the effect environmental factors on the respective management accounting theory. The results are presented and discussed below.

Table 4.3.1a: Effect of Environmental Factors on Management Accounting Theory

	Frequency	Percentage (%)
Market Activity		
Market competition supports management accounting	128	59.26
Market competition does not management accounting	88	40.74
Total	216	100
Customer Influence/Environmental Management Accounting		
Costumers perception affects management accounting	116	53.70
Costumers perception does not affect management accounting	100	46.30
Total	216	100.00
Regulatory Activities		
Regulatory Pressure supports management accounting	35	16.20
Regulatory Pressure does not support management accounting	181	83.80
Total	216	100.00
Responsibility		
Social and moral responsibility supports management accounting	19	8.80
Social and moral responsibility does not support management accounting	197	91.20
Total	216	100
Environmental Factor Affects Management Accounting		
Environmental factors affects at least one management accounting	211	97.69
Environmental factors does not affect any management accounting	5	2.31
Total	216	100

Source: Author's computation from field survey, 2020

128 or 59.26 per cent are in support that market competition affects management accounting, while 88 or 40.74 per cent did not see any effect of market competition on management accounting. Majority of the respondents agree that market competition affects management accounting theory. Therefore, market competition has a significant effect on management accounting.

As regards the effect of costumer's perception on management accounting, the analysis showed 116 or 53.70 per cent for the effect of costumer's perception on management accounting. However, 100 or 46.30 per cent say no effect of costumer's perception on management accounting. Majority of the respondents believe that costumer's perception has affected management accounting. Therefore, environmental factor has a significant effect on management accounting.

35 or 16.20 per cent point out an effect of regulatory pressures on management accounting, while 181 or 83.80 per cent were of the view that regulatory pressures has no effect on management accounting. The view of the majority of the respondents is that regulatory pressures have no effect on management accounting. Therefore, regulatory pressures have no significant effect on management accounting.

Concerning the effect of social and moral responsibility on management accounting, the result showed that 19 or 8.80 per cent were of the view that social and moral responsibility has an effect on management accounting, while the views of 197 or 91.20 per cent are that social and moral responsibility has no effect on management accounting. The view of the majority of the respondents is that social and moral responsibility has no effect on management accounting. Therefore, social and moral responsibility has no significant effect on management accounting in Bayelsa state.

211 or 97.69 per cent were of the view that environmental factors affects at least one of the management accounting practice; while 5 or 2.31 per cent say environmental factors does not affect any economic activity. Majority of the

respondents believe that environmental factors affect at least one management accounting practice. Therefore, an environmental factor has a significant effect on at least management theory.

The two sample t-test was employed to test the equality of mean of the responses within the two groups (the company staff and management staff) on the effect of environmental factors on management accounting theory. We were not willing to assume that the variances were equal and, therefore, used Welch's formula in our estimation. The result is reported in Table 4.3.1b below.

Table 4.3.1b: A test of difference in response of company's staff and management staffs on the effect of environmental factors on management theory

Variable	Mean	Standard Error	Standard Deviation
The difference in response to the effect of Market competition on Management Accounting Theory			
Company Staff	0.5918	0.0352	0.4928
Management staff	0.6000	0.1124	0.5026
Combined	0.5926	0.0335	0.4925
Difference	-0.0082	0.1178	
t-statistics	-0.0693		
P-value	0.6520		
Welch's degrees of freedom	23.2951		
The difference in response to the effect of Customer Influence on Management Accounting Theory			
Company Staff	0.5306	0.0357	0.5003
Management staff	0.6000	0.1123	0.5026
Combined	0.5370	0.0340	0.4998
Difference	-0.0694	0.1179	
t-statistics	-0.5884		
P-value	0.5619		
Welch's degrees of freedom	23.4338		
The difference in response to the effect of Regulatory Pressure on Management Accounting Theory			
Company Staff	0.1633	0.0265	0.3706
Management staff	0.1500	0.0819	0.3663
Combined	0.1620	0.0251	0.3693
Difference	0.0133	0.0861	
t-statistics	0.1541		
P-value	0.8788		
Welch's degrees of freedom	23.5839		
The difference in response to the effect of Social and moral responsibility on Management Accounting Theory			
Company Staff	0.0969	0.0212	0.2966
Management staff	0.0000	0.0000	0.0000
Combined	0.0879	0.0193	0.0499
Difference	0.0969	0.0212	
t-statistics	4.5752		
P-value	0.0000		
Welch's degrees of freedom	195		

Source: Computed from Field Survey, 2020

The test indicates that there is no statistically significant difference in mean, with a significant level of 65.20% for the effect of market competition on management accounting practice; 56.19% for the effect of customer influence on management accounting practice; and 87.88% for the effect of regulatory pressure on management accounting practice. On the other hand, the result showed a significant difference in mean, with a significant level of 00.00% and 2.50% respectively for the effect of social and moral responsibility on management accounting practice and, at least on one economic activity. This means that there is no statistically significant difference in response of the company's staff and the management staff on the effect of environmental factors on management accounting theory on – market competition, customer's influence, and regulatory pressure, social and moral responsibility. However, a statistically significant difference exists on the response of the company's staff and the management people on the effect of environmental factors on management accounting practice. The effect sizes (based on the mean comparison) were also estimated to determine the magnitude of the effect of environmental factors on management accounting practice. The result is reported in Table 4.3.1c

Table 4.3.1c: Effect size describing the magnitude of the effect of Environmental Factors on Management Accounting Theory

Effect Size	Estimate
Market Activity	
Cohen's d	-0.0098
Hedges's g	-0.0097
Point-Biserial r	-0.0051
Welch's degrees of freedom	190.5945
Customer Influence	
Cohen's d	-0.0806
Hedges's g	-0.0803
Point-Biserial r	-0.0405
Welch's degrees of freedom	215.7657
Regulatory	
Cohen's d	0.0282
Hedges's g	0.0281
Point-Biserial r	0.0221
Welch's degrees of freedom	49.8517
Responsibility	
Cohen's d	0.3504
Hedges's g	0.3491
Point-Biserial r	0.3186
Welch's degrees of freedom	196.0000

Source: Authors computation from field survey, 2020

With respect to market activities, Cohen's d, and Hedges's g indicate that the scores for market competition having no effect on management accounting practice is 0.0098 standard deviations lower than the scores for market competition impacting on management accounting practice. The Point-Biserial r correlation coefficient (-0.0051) indicates that there is a small, negative correlation between the scores for the effect of market competition on management accounting practice and the responses of no effect of market competition on management accounting practice.

A similar result was found with respect to the effect of customer influence on management accounting practice. The Cohen's d, (-0.0806) and Hedges's g (-0.0803) show that customer influence having no significant effect on management accounting is 0.08 standard deviations lower than the effect of customer influence on management accounting practice. The Point-Biserial r correlation coefficient (-0.0405) indicates a small negative correlation

between the scores for those who support that customer influence affect management accounting practice and those who do not support that customer influence affect management accounting practice.

The Cohen's d and Hedges's g coefficients for a of regulatory pressure on management accounting practice indicate that regulatory pressure having no significant effect on management accounting theory is 0.028 standard deviations higher than the effect of regulatory pressure on management accounting practice. A small positive Point-Biserial r correlation coefficient (0.0221) was found, indicating a small negative correlation between the scores for regulatory pressure having no significant effect on management accounting practice and regulatory pressure having a significant effect on management accounting theory. Also, Cohen's d and Hedges's g coefficients for regulatory responsibility and management accounting practice show 0.35 higher standard deviations for social and moral responsibility having no significant effect on management accounting practice than social and moral responsibility having a significant effect on management accounting practice. The Point-Biserial r correlation coefficient (0.3186) shows a moderate positive correlation between the scores for social and moral responsibility an having no significant effect on management accounting practice and the scores for social and moral responsibility having a significant effect on management accounting theory.

CONCLUSION

The scores for market competition having no effect on management accounting practice is lower than the scores for market competition impacting on management accounting practice; thus market competition have a significant effect on management accounting. Also the result show that score of customer influence having no significant effect on management accounting is lower than the effect of customer influence on management accounting practice. Similarly the result show that score of regulatory pressure having no significant effect on management accounting is lower than the effect of regulatory pressure on management accounting practice. On the other hand, the result show that score of social and moral responsibility having no significant effect on management accounting is higher than the effect of social and moral responsibility on management accounting practice. These findings confirm to the research of Almahamid et al. (2012) and Mohamad et al. (2014) which show that levels of sophistication in management accounting practices are depending on internal and external factors. This study therefore concludes that customer influence, regulatory pressures and high environmental uncertainty among other determining factors of management accounting theory are the most determining factors of management accounting theory in Bayelsa state. While other internal and external environmental factors also have a strong correlation with management accounting theory.

Reference

- Ahmad, N. S & Leftesi, A. (2014). An exploratory study of the level of sophistication of management accounting practices in libyan manufacturing companies. *The International Journal of Business and Management*. 5(2), 345-357.
- Almahamid, S. Al-Nimis, M. & Sleihat, N. (2012). An approach to organizing a management accounting curriculum. *Issues in Accounting Education*, 5(9), 2-15,
- Donaldson, L. (2001). The contingency theory of organizations, *International Encyclopedia of the Social & Behavioral Sciences*, 9(1):33-47
- Edwards, J., Anderson, M., & Chandler, R. (1995), "How Not to Mount a Pro-fessional Project: The Formation of the ICAEW in 1880," *Accounting and Business Research*, 35(3): 229-248
- Ghasemi, R. (2015). The relationship among strategy, competition and management accounting systems on organizational performance», *European Online Journal of Natural and Social Sciences*, 4(3):565-581.
- Hoskin, K. W., & Macve, R. H. (1988). The genesis of accountability: The west point connections. *Accounting, Organizations and Society*, 13(1), 37-73. [https://doi.org/10.1016/0361-3682\(88\)90025-6](https://doi.org/10.1016/0361-3682(88)90025-6)

- Hoskin, K. W., & Macve, R. H. (1988). The genesis of accountability: The west point connections. *Accounting, Organizations and Society*, 13(1), 37–73. [https://doi.org/10.1016/0361-3682\(88\)90025-6](https://doi.org/10.1016/0361-3682(88)90025-6)
- Johnson, H. T., & Kaplan, R. S. (1987). The Rise and Fall of Management Accounting. *IEEE Engineering Management Review*, 15(3), 36–44. <https://doi.org/10.1109/EMR.1987.430629>
- Johnson, H. T., & Kaplan, R. S. (1987). The Rise and Fall of Management Accounting. *IEEE Engineering Management Review*, 15(3), 36–44. <https://doi.org/10.1109/EMR.1987.430629>
- McLellan, J. D. (2014). Management accounting theory and practice: Measuring the gap in United States Business. *Journal of Accounting – Business & Management*, 21(1):53-68.
- MIA, L, & Clark B. (1999). Market competition management accounting sysyem and business unit performance. *Management Accounting Research*, 10(2), 137-158.
- MIA (2017) Malaysian Institute of Accountant. *Member Statistics*. Retrieved from http://www.mia.org.my/v1/membership/services/statistics/member_statistics.aspx
- Mohammad S. M. , Hansan, O. & Kashani H.H. (2012). The changing world of management accounting and financial management. *Strategic Management Journal*, 6(40), 306-310.
- Neimark, M. & Tinker, T. (1986). The social construction of management control systems. *Accounting, Organizations and Society* 11(4-5), 369-395
- Otley, D. T. (1980). The contingency theory of management accounting: Achievement and Prognosis. *Accounting, Organizations and Society*, 5(4): 413-428.
- Pearson, K. (1901) Look Out, Management Accountants. *Management Accounting. International Studies in Management and Organizations*. 27(2), 95-12
- Rosmawati, M., & Normah, H. (2004).The current state of management accounting practice in selected Malaysian companies: An empirical evidence *International Business Management Conference*; p14
- Scapers R. W. (1990). New direction in management accounting practices and research. *Management Accounting Research*, 1(3), 139-154.
- Simon, H. A. (1979) “Rational decision making in business organizations” [Nobel Memorial Lecture], *American Economic Review*, 69(4), September: 493-513.
- Sunarni, C. W. (2013). Management accounting practices and the role of management accountant: evidence from manufacturing companies throughout Yogyakarta, Indonesia. *Review Journal of Management*, 18(2), 233- 248
- Tijani, A. & Samira, B. (2017). The impact of external and internal factors on the management accounting practices. *International Journal of Finance and Accounting*, 6(2), 46-58