
Budget Emphasis, Non-Financial Measures and Information Manipulation: A Moderated Regression Approach

¹FAGBEMI, TEMITOPE OLAMIDE, ¹ABOGUN, S. and ²AJIBOLADE, S. O.

¹University of Ilorin, Nigeria

²University of Lagos, Nigeria

INTRODUCTION

Budget emphasis is one of the many types of accounting controls existing in organisations (Simons, 1987). There is empirical evidence to support the expectation that an emphasis on budget targets interact with different business strategy to affect performance (Simons, 1987). However, the interaction between an emphasis on budget targets and other types of accounting controls affecting functional managers' dysfunctional behaviour appears to have attracted less attention in the literature.

Previous studies on managers who are unable to achieve their targets showed that such managers face the prospect of interventions by upper management, the loss of organisational resources, the loss of annual bonuses, and ultimately the loss of their job (Merchant & Manzoni, 1989). Under these circumstances, managers may look for ways to protect themselves from the downside risk of missing budget targets and the stigma normally attached to underachievers (Lukka, 1988; Onsi, 1973; Schiff & Lewin, 1970). Possible ways of protection can be obtained by negotiating for highly achievable targets through slack creation or by focusing on business matters that improve current period

performance while sometimes causing harm to the long-term effectiveness of the firm often referred to as managerial short-term orientation (a form of dysfunctional behaviour).

There are also conflicting views in relation to budgetary control. Empirical evidence regarding alleged dysfunctional consequences of a rigid budgetary control style (emphasis on targets) has been unclear. For example, Hopwood (1972) found that rigid budgetary controls did not lead to increased levels of budget-related tensions and found only mixed support for its associated dysfunctional behaviours (obtaining easy budget targets and having a short-term view of the job). However, Otley (1978) found that a high emphasis placed on meeting the budget led to budgets being more closely met (that is, higher budget accuracy). One important variable in this dilemma was past performance, which seemed to affect both the rigidity of budgetary controls as well as the incidence of dysfunctional budget-related behaviours (budget target manipulation). Otley (1978) also pointed out that the above relationships are dependent on the organisational context in which the budgetary control style is used, such as an organisation's operating environment and size. Furthermore, Dunk (1993) and Merchant (1985)

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found that budget slack was low when budget emphasis was high.

Hopwood (1972) suggested that a high reliance on accounting performance measures such as budget targets by superiors to evaluate their subordinates (high budget emphasis) may be associated with high job-related tension, dysfunctional behaviour and poor job performance. Brownell (1982), however, suggested that budgetary participation might moderate the relationship between budget emphasis and managerial performance. Based on the principle of operant conditioning and balance theory, he theorized that a match between high (low) budget emphasis and high (low) budgetary participation is crucial for beneficial behavioural outcomes to occur. Hence, the organization's interest is best served if subordinates, who are evaluated with a high budget emphasis evaluative style, are allowed high budgetary participation, whilst subordinates evaluated with a low budget emphasis evaluative style are allowed only low budgetary participation. However, there is dearth of empirical support on whether non-financial measures moderate this relationship.

Studies have also shown that financial measures such as profit and return on capital employed encourage dysfunctional behaviour such as short-termism or myopia (Kaplan, 1984; Marginson, McAulay, Roush & Van Zijl, 2009; Merchant and Van der Stede, 2007). In response to this limitation of financial measures, non-financial measures focusing on such areas as staff attitude, customer satisfaction and quality have been suggested (Ittner, Larcker and Randall, 2003). However, the existence of sparse literature in this area has recently been identified (Marginson et al., 2009). Management accounting controls, including performance evaluation procedures, should be designed to engender positive attitudes and behaviour (Merchant and Van der Stede, 2003).

While majority of these studies have been dominated by studies from developed economies, there is the need to provide evidence from Nigeria, a developing economy. Wallace (1987) noted that studies from developing economies should be improved upon so as to augment existing body of knowledge. Consequently, this study would provide contributions from a developing country like Nigeria as such evidence may be necessary for improving the choice and use of these control system. Therefore, the following specific objectives are pursued in this study:

- i. examine the extent of the impact of budget emphasis on managerial dysfunctional behaviour of quoted companies in Nigeria;
- ii. examine the extent of the impact of non-financial measurement on managerial dysfunctional behaviour of quoted companies in Nigeria; and
- iii. examine whether non-financial measurement moderates the relationship between budget emphasis and managerial dysfunctional behaviour of quoted companies in Nigeria.

In achieving the above objectives, the following research questions are of importance.

- i. To what extent does budget emphasis impact on managerial dysfunctional behaviour of quoted companies?
- ii. To what extent does non-financial measurement impact on managerial dysfunctional behaviour of quoted companies in Nigeria?
- iii. Does non-financial measurement moderate the relationship between budget emphasis and managerial dysfunctional behaviour of quoted companies in Nigeria?

Towards answering the above research questions, the following propositions are made.

- H01 There is no significant difference between the level of managerial dysfunctional behaviour

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of quoted companies with high level of budget emphasis and those with low budget emphasis.

- H02 Non-financial measurement has no significant impact on the extent of managerial dysfunctional behaviour of quoted companies.
- H03 Non-financial measurement has no moderating effect on the relationship between budget emphasis and managerial dysfunctional behaviour of quoted companies.

The results obtained from the above propositions should be of significance to quoted companies in Nigerian as the study highlights the impact of two management control systems on managers' dysfunctional practices. This will create awareness on dysfunctional consequences which may arise from their choice of control systems.

LITERATURE REVIEW

The concern for improved control systems in order to enhance organisational performance has been receiving a growing interest among researchers, managers and regulators. Studies have shown that firms use their management control systems (MCS) such as budget participation, budget emphasis and non-financial measures to motivate employee behaviour (Arowomole, 1995; Horngren et al., 2005) and attain organisational objectives (Kloot, 1997). The relationship between MCS and organisational effectiveness is however still laden with contradictions in literature (e.g. Chenhall & Brownell, 1988; Hope & Fraser, 2003; Otley, 1978) and most of these studies have been mainly budget-based.

Budget emphasis (BE) came to limelight when human involvement in budgeting process began to receive attention from researchers (such as, Birneger

et al., 1983; Briers and Hirst, 1990). In an earlier study of Argyris (1952) on factory supervisors in four production firms, the budget was perceived to be a source of pressure and tension for them. As a result of this pressure, supervisors were observed to be expressing negative attitudes (dysfunctional behaviour) towards their superiors and budget procedures. From this study, it became apparent that there is the need to complement the knowledge of budget process with knowledge of human behaviour. Similarly, the study also suggested that dysfunctional behaviour is not just a natural human tendency, causing a need to use control, but that dysfunctional behaviour could also be provoked by using budgetary control. In a later study by Harrison (1993), BE became very synonymous with reliance on accounting performance measures (RAPM) when he described RAPM as the extent to which supervisors rely on and emphasize financial targets such as the budget while DeCoster and Fertakis' (1968) study aligned with the term "budget pressure". Studies on BE have taken a special position in the management accounting literature as a result of its impact on several outcomes of management accounting research (Kren & Liao, 1988; Lau et al., 1995; Otley, 1980).

The study of Ni et al. (2007) suggested that although BP is a critical mechanism in management accounting research, other independent variables related to the budgeting system such as budget emphasis (BE) could play a different role. Hence accounting controls, such as the extent of BE in performance evaluation should not be viewed in isolation, but as a complete system of control along with other controls system mechanisms to achieve the organisational objectives (Chow et al., 1996; Flamholtz, 1983; Merchant, 1985; Otley, 1980).

Callahan and Waymire (2007) investigated whether budgetary control has a relationship with performance by using a sample of large U.S. cities

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over the period 2003 to 2004. They noted that these cities exhibited tight emphasis on the budget under the same legal and regulatory constraints and due to the balanced budget requirements. The study proposed that high emphasis on budgetary control, which was measured by level of emphasis on budget variance, has a relationship with performance (which was measured using bond rating). The study found that the effective level of budgetary control is significantly and positively related to bond rating. The study suggested that managers interested in maintaining or improving their municipal bond ratings to manage debt costs may consider paying closer attention to the effective level of budgetary control within the cities.

The link between budget emphasis and organisational commitment has also been explored (Subramaniam & Mia, 2003; Welker & Marner, 1994). While the study of Welker & Marner (1994) failed to find a significant effect of BE on organisational commitment, Subramaniam and Mia (2003) noted that budget emphasis (that is, reliance on accounting measures such as the budget) relates negatively to organisational commitment. Contrary to the findings of Welker & Marner (1994), the study of Lau (2011) indicated that the relationship between the emphasis on meeting the budget and managerial performance is not significant. Aside from such outcomes as managerial performance, job satisfaction, organisational commitment and strategy, other studies have focused on behavioural outcomes such as budgetary slack (Dunk, 1993a) and job related tensions (Emsley, 2001).

Emsley (2001) also investigated budget-emphasis in performance evaluation and managers' job related tension. Using a sample of thirty-eight managers, the study noted that the variability in job-related tension can be explained by both budget emphasis and information completeness. The study suggested that there is a direct relationship between budget

emphasis and job-related tension. Fuad (2004) also found support for a strong relationship between budget emphasis and the extent to which managers created slack while Lau (1999) noted that managers' propensity to create slack was associated with emphasis on setting and meeting tight budget targets.

A number of studies have tried to explain the differences in the appropriateness of BE through the introduction of mediating variables. One of these studies is Hirst (1983b) which examined BE, task uncertainty and dysfunctional behaviour. Hirst argued that budget emphasis in performance measurement could cause superior-subordinate conflicts and job related tension (JRT). The study noted that BE is moderated by uncertainty. Specifically, the relationship between BE and JRT is low when uncertainty is high. This study was replicated by Govindarajan (1984) and found that BE was less when environmental uncertainty was high.

Lau and Eggleton (2002) investigated the effect of national culture on Australian and Singaporean managers' participation and propensity to create slack. The results showed that national culture has a significant effect on budgetary participation. The results also suggested that the effect of national culture on propensity to create slack is also likely to be through the interaction of national culture with budget emphasis and information asymmetry. In a separate analysis of the two categories of managers, Lau and Eggleton found that budget emphasis interacts with information asymmetry to affect the propensity to create slack in both Australia and Singapore. While this interaction is negative for Australian managers, it is positive for Singaporean managers.

Lau and Caby (2010) investigated whether budgetary participation interacts with budget emphasis and task situations to affect managerial attitudes using a sample of forty-four French

managers. The study proposed a significant three-way interaction between budget emphasis, budgetary participation and task difficulty affecting managers' job satisfaction. Using questionnaire survey and hierarchical regression analysis, the study found a significant three-way interaction between budget emphasis, budgetary participation and task difficulty affecting job satisfaction. However, this study failed to provide evidence on whether non-financial measures moderate this relationship.

In a more recent study, the moderating effect of role clarity on the relationship between emphasis in meeting the budget and managerial performance was explored by Lau (2011) using a sample of one hundred and twenty-one managers from manufacturing organisations. The responses were analysed using structural equation model and found that emphasis on financial data such as the budget affected managerial performance through role clarity. However, the study did not provide evidence on the behavioural consequences of this control system but Lau suggested that research is needed on behavioural consequences for a better understanding of this control system.

Marginson et al. (2009) investigated the correlates between performance measurement systems and short-termism, a form of dysfunctional behaviour in a Telecommunication company. Using one hundred usable responses from senior divisional managers of the company, the study sought to establish the extent to which the diagnostic and interactive uses of financial and non-financial measures give rise to short-termism. The study analysed responses using confirmatory factor analysis, scaling, and correlation analysis. Although the results of the analysis revealed that there is a negative relationship between interactive use of non-financial measures and short-termism, diagnostic use of non-financial measures heightens managers' decision to make

inter-temporal trade-off choices that prioritise the short term to the detriment of the long term goal of the firm. The study also noted an imbalance in favour of the diagnostic use over the interactive use of non-financial performance measures is associated with short-termism. Despite that this study provided a link between non-financial measures and a form of dysfunctional behaviour (short-termism), the use of respondents from just a single company is a major limitation on the extent of generalisation which can be made from the study of Marginson et al. (2009).

Merchant and Van der Stede (2007) opined that management myopia (a dysfunctional behaviour) is consequence of the use of financial results control systems built on accounting measures of performance. Due to this, studies have recommended the introduction of additional, non-financial measures, which include customer satisfaction, quality and staff attitude (see, for instance, Ittner and Larcker, 1998). This recommendation was based upon the proposition that future orientated non-financial measures overcome the short-term orientation encouraged by backward looking financial measures (Ittner, Larcker and Meyer, 2003). Hassan, Emad and Amal (2010) also found support that non-financial measures cause a reduction in earnings management behaviour.

RESEARCH METHODOLOGY

A cross sectional survey research design was used in this study. This research strategy is considered necessary because of its ability to view comprehensively and in detail the major questions raised in the study. Frankfort-Nachmias and Nachmias (2006) described this design as the major design used in social science fields and is often identified with "survey research" (p. 129). In a study assessing the quality of evidence in empirical

management accounting research, Van der Stede, Young and Chen (2005) argued that studies in management accounting are largely cross sectional survey. Therefore, in order to elicit detailed responses for this study, survey research strategy was considered appropriate. This design is also consistent with previous studies of Tsui (2001) and Ajibolade, Arowomole & Ojikutu (2010) on management control systems. Hence, this design would give room for inferential statistics to be used in evaluating the propositions made in this study.

Since this study is on Nigerian quoted companies, the population of this study is made up of all companies listed on the Nigerian Stock Exchange (NSE). Presently, there are two hundred and eighteen (218) companies on the Exchange (NSE, 2011). Therefore, from the sampling frame, a sample of one hundred and twelve (112) quoted companies was selected.

Primary and secondary data were relied upon in this study. A questionnaire survey was adopted in obtaining primary data for this study. Secondary data were obtained from the Nigerian Stock Exchange fact-book (2011) and prior literatures on MCS.

Measurement of variables

The variables used were informed from previous studies in line with the suggestion of Gerdin (2005) that 'when attempting to extend empirical research in any area, it is important to keep variables constant over time' (p. 102). The remainder of this section describes each of the variables as contained in the questionnaire.

i. Budget Emphasis

This section of the questionnaire centred on measurement of the level of emphasis placed on the attainment of budget figures. Following the study of Hopwood (1972) on how the budget is used in evaluating employees, several studies

have adopted the eight-item measure of superiors' evaluation style. Such studies (Brownell, 1982; Brownell & Dunk, 1991; Brownell & Hirst, 1986; Lau, Low & Eggleton, 1995; Otley, 1978) have operationalised this variable by asking respondents to rank or rate the extent of emphasis that their superiors place on meeting the budget. Therefore, this study adapts Otley (1978) measure of budget emphasis which measured concern with costs and meeting the budget using six items which were measured on a five-point Likert-scale.

ii. Non-Financial Measurement

This section of the questionnaire dealt with obtaining information to evaluate the extent of attention attached to non-financial performance measures. Seven items were used to measure the level of attention given to non-financial measures on a five-point Likert-scale. These items include customer service, product quality, work attitude, employee relations, team playing, share of market and product innovation. This measure was designed based on Kaplan and Norton (1992) who identified non-financial measures relating to customers' perspective, internal business perspective and innovation and learning perspective. This measure has also been used in recent studies (e.g. Chow & Van der Stede, 2006; Ittner & Larcker, 2003). For example, Chow and Van der Stede (2006) operationalised non-financial measures using three broad measures cutting across internal operating measures, employee-oriented measures and customer-oriented measures.

iii. Information manipulation

This section of the questionnaire dealt with managerial response to control systems. The study relied on the insights gained from previous studies of Birnberg et al. (1983);

Jaworski and Young (1990); Van der Stede (2000). For example, Jaworski and Young (1990) measured dysfunctional behaviour using five-item on a five-point Likert-scaled instrument. For the purpose of this study, information manipulation is used as a form of dysfunctional behaviour. This is defined in terms of methods used in distorting the information system. Such methods consist of smoothing and filtering.

Data collection and method of data analysis

Copies of the questionnaire were administered on four hundred and forty-eight managers using stratified random sampling procedure. The study targeted two groups of managers from accounting/finance and other operating units such as production, operations sales or marketing. Two copies of the questionnaire were given to each group in a company, making a total of four (4) respondents from each company. Therefore, given the sample size of one hundred and twelve companies, a total of four hundred and forty-eight copies of the questionnaire were administered. The addresses of the companies were obtained from the 2011 Factbook of the Nigerian Stock Exchange.

The data collected were analysed using both descriptive and inferential statistics. Inferential statistics such as Pearson product moment correlation, independent samples t-tests, linear regression, multiple regression analysis and moderated regression analysis (MRA) were used.

RESULTS

The result of the correlation analysis as reported in Table 1 shows positive relationships between all the variables of the study. While budget emphasis has a significant positive relationship with information manipulation Budget participation is found to be

positively correlated with information manipulation (correlation coefficient of 0.701, $p < 0.05$), non-financial measure has a low and non-significant positive relationship with information manipulation (correlation coefficient of 0.045, $p > 0.05$). On the contrary, the combined effect of budget emphasis and non-financial measures in association with information manipulation shows that there is a significant positive relationship.

Although the correlation result suggests that there is a positive relationship exists among the variables, such relationship cannot be interpreted to mean absolute causal relationship. Hence, the study went ahead to use simple linear regression which revealed that budget emphasis has a significant impact on managerial dysfunctional behaviour (information manipulation) with about 49% explanatory power as shown in Table 2. These results can be interpreted as evidence that budget emphasis has a statistically significant influence on the behaviours exhibited by managers. However, the regression results was also found to be statistically non-significant at $p > 0.05$ with negligible variation in information manipulation explained by non-financial measures (NFM) as shown in Tables 2 and 3. Hence, the null hypothesis of NFM having no significant impact on MDB was not rejected.

The fitness of the model is explained by F-ratio greater than 1 and $p < 0.05$, suggesting that the model fitted is significant for budget emphasis. As shown in Table 3, F-value is slightly above 298.0, which is also significant at $p < 0.05$. However, the reverse is the case for non-financial measures. Hence, conclusion can be drawn that the regression model only results in significantly better prediction of information manipulation as a form of managerial dysfunctional behaviour under budget emphasis alone.

The coefficients of the model and t-values are shown in Table 4. The probability that the t-values occurred

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by chance is less than 0.001 under budget emphasis, suggesting that the variable reflect genuine effects. However, such claim cannot be said of non-financial measures (NFM). The study concluded that budget emphasis (BE) makes a significant contribution

($p < 0.001$) to predicting information manipulation as a form of managerial dysfunctional behaviour. Hence, BE has significant impact on information manipulation while NFM has no significant impact on information manipulation.

Table 1: Correlation matrix of variables in the study

	BE	NFM	CBN	IM
Budget emphasis (BE)	1	.151(**)	.802(**)	.701(**)
Non-financial measures (NFM)		1	.711(**)	.045
Combined BE and NFM (CBN)			1	.526(**)
Information manipulation (IM)				1

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

Source: Research survey

Table 2: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701(a)	.491	.490	.37487
2	.045(b)	.002	-.001	.52504

a Predictors: (Constant), BE

b Predictors: (Constant), NFM

Source: Research Survey

Table 3: Summary of fitness of the model(c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.929	1	41.929	298.367	.000(a)
	Residual	43.423	309	.141		
	Total	85.352	310			
2	Regression	.171	1	.171	.620	.432(b)
	Residual	85.182	309	.276		
	Total	85.352	310			

a Predictors: (Constant), BE, b Predictors: (Constant), NFM, c Dependent Variable: IM

Source: Research Survey

Table 4: Summary of Regression Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.836	.159		5.272	.000
	BE	.761	.044	.701	17.273	.000
2	(Constant)	3.340	.268		12.451	.000
	NFM	.057	.073	.045	.787	.432

a Dependent Variable: IM

Source: Research Survey, 2011

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Following the non-contributory power of non-financial measures (NFM) to information manipulation, the study went further to examine whether NFM would moderate the relationship between budget emphasis and information manipulation. In order to run the regression, the block form was used.

The results indicate that the moderating variable is statistically significant at $p < 0.05$. The model with the moderating variable explained about 52% of the variation in information manipulation. The

moderating effect of NFM accounted for a low but significant increase in R^2 at $p < 0.05$ ($\Delta R^2 = 0.022$, $\Delta F = 14.192$, Sig. $\Delta F = .000$). Details of this result are presented in Table 5. The model fitted for the moderating effect of NFM is also significant with F-value of 109.698 at $p < 0.05$ as shown in Table 6 while Table 7 shows the coefficient of the moderating variable which is also significant. Therefore, conclusion can be drawn that the moderating effect of NFM results in better prediction of information manipulation.

Table 5: Model Summary on Moderating Effect of Non-financial Measures

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics				
					R ² Change	F Change	df1	df2	Sig. F Change
1	.701(a)	.491	.490	.37487	.491	298.367	1	309	.000
3	.761(b)	.495	.492	.37407	.004	2.323	1	308	.129
3	.761(c)	.517	.513	.36631	.022	14.192	1	307	.000

a Predictors: (Constant), BE

c Predictors: (Constant), BE, NFM

c Predictors: (Constant), BE, NFM, BE*NFM

Source: Research Survey

4.6 Summary of Fitness of The Model (d)

1	Regression	41.929	1	41.929	298.367	.000(a)
	Residual	43.423	309	.141		
	Total	85.352	310			
2	Regression	42.254	2	21.127	150.984	.000(b)
	Residual	43.098	308	.140		
	Total	85.352	310			
3	Regression	44.158	3	14.719	109.698	.000(c)
	Residual	41.194	307	.134		
	Total	85.352	310			

a Predictors: (Constant), BE; b Predictors: (Constant), BE, NFM

c Predictors: (Constant), BE, NFM, BE*NFM; d Dependent Variable: IM

Source: Research Survey

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Table 4.7: Summary of Regression Coefficients (a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.836	.159		5.272	.000
	BE	.761	.044	.701	17.273	.000
2	(Constant)	1.092	.231		4.730	.000
	BE	.772	.044	.710	17.342	.000
	NFM	-.080	.052	-.062	-1.524	.129
3	(Constant)	-4.571	1.520		-3.007	.003
	BE	2.325	.415	2.140	5.608	.000
	NFM	1.497	.422	1.170	3.550	.000
	BE*NFM	-.432	.115	-2.029	-3.767	.000

a Dependent Variable: IM
Source: Research Survey

INTERPRETATION OF RESULTS

The findings of this study indicated that superior managers' emphasis on meeting budgetary target is above average and is consistent with the findings of Dunk (1993) which reported a mean score of 5.778 using a seven-point scale. Dunk's study noted that there is a difference in the level of budget slack created depending on the level of budget analysis. Fuad (2004) also found support for a strong relationship between budget emphasis and the extent to which managers created slack. Lau (1999) noted that managers' propensity to create slack was associated with emphasis on setting and meeting tight budget targets. Therefore, the study conclude that the extent of managerial dysfunctional behaviour is a function of the emphasis that superior managers place on achieving financial targets set out in the budget. The study rejected the null hypothesis of no significant difference.

Within the sparse literature on the negative consequences of MCS, replication of coherent findings on contemporary issue such as non-financial measures has received lesser attention (Chenhall, 2003). A study by Chow and Van der Stede (2006) compared financial and nonfinancial measures as seen by the manufacturing managers in

curtailing short-termism and gamesmanship. The findings of the study suggested that non-financial measures are seen as being more effective at curtailing short-termism (a form of dysfunctional behaviour) and gamesmanship. Hassan et al. (2010) also found support that non-financial measures cause a reduction in earnings management behaviour. The findings of this study corroborate earlier findings that non-financial measures do not engender dysfunctional behaviour. However, it did moderate the relationship between budget emphasis and information manipulation.

CONCLUSION AND RECOMMENDATIONS

This study aimed to add to literature by providing evidence on the relationship between budget emphasis, non-financial measures and information manipulation in Nigerian quoted companies. Through empirical results from the targeted companies, this study has been able to achieve its aim by providing support on the propositions that budget emphasis can predict the extent of information manipulation engaged in by managers in Nigeria Nigerian quoted companies. However, non-financial measure was found to have no explanatory power on managers' extent of manipulating information system. Nonetheless,

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evidence has been found on the moderating effect of non-financial measures on the relationship between budget emphasis and information manipulation. Therefore, this study recommends that managers should pay particular attention the choice of control systems used within their organisation, so as not to overlook the negative consequences which such controls could engender. Furthermore, a combined use of budgetary and non-financial control should be encouraged in order to minimise the dysfunctional consequences of control systems. This study also recommends that research focusing on the moderating effects of budget participation and environmental uncertainty on the budget emphasis/information manipulation link should be explored as the study Brownell (1982) contend that low budget emphasis should be matched with low budget participation while Brownell (1985) argued on environmental uncertainty.

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BIOGRAPHIES

Fagbemi, Temitope Olamide is Lecturer with specializations in Management and Financial Accounting Areas at University of Ilorin, Kwara State, Nigeria. He had his doctoral degree programme (Ph.D.) from the prestigious Department of Accounting, University of Lagos, Nigeria. He did Master of Science and Bachelor of Science from the University of Ilorin, Kwara State, Nigeria. He has about seven years of corporate experience and more than six years of teaching and research experience. His research papers have been published in reputed journals like *Advances in Management*, (Ilorin, Nigeria); *Journal of Arid Zone Economy*, (Maiduguri, Nigeria); *Research Journal of Finance and Accounting*, (IISTE, USA); *International Journal of Business and Management* (IJBM Canada) among others. He has done research work (financial accounts automation and training) in VDC-GreenValue Consult, Lagos State, Nigeria while being in the corporate world. His research interests are in the area of management accounting, financial modelling and behavioural issues such as; corporate governance, CSR disclosure, tax evasion and audit quality.

Abogun, Segun is a Lecturer at the Department of Accounting, University of Ilorin, Nigeria. He is a Ph.D. student in the same department. His area of interest is Management accounting and corporate governance. He has published in both local and international journals.

Ajibolade, Solabomi Omobola is a Senior Lecturer and Head of Department at the Department of Accounting, University of Lagos, Nigeria. She had her doctoral degree programme (Ph.D.) from the prestigious Department of Accounting, University of Lagos, Nigeria. She has got over a decade years of research and teaching experience. She has also supervised a number of postgraduate students at Masters and Doctoral levels. She is a member of a number of professional accounting bodies. Her areas of research interests are financial reporting, management accounting and ethics. Her research papers have been published in reputed refereed local and international journals. She has facilitated research and training in Universities across Africa (such as Legon Business School, Ghana) and America (Texas Southern University, USA).