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# STRATEGIC MANAGEMENT ACCOUNTING TECHNIQUES USAGE, STRATEGIC CHOICES, AND PERFORMANCE OF FINANCIAL INSTITUTIONS IN NIGERIA

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## ABSTRACT

#### **Article History**

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#### **Keywords**

Strategy management accounting Techniques Usage Accountants' participation Strategic choices Strategic patterns Performance. The paper examined the impact of strategic management accounting (SMA) techniques' usage and strategic choices on the performance of financial institutions in Nigeria. Based on the administration of questionnaire to 156 top management employees of 13 deposit money banks in Benin metropolis, Edo State the paper examined whether SMA dimensions (17 SMA techniques usage and the participation of accountants in strategic decision making) and strategic choices (strategic pattern, emergent strategy and market orientation) affect the performance of deposit money banks. The findings from the multiple regression analysis showed that whereas SMA techniques usage had a significantly negative impact on corporate financial performance, accountant participation in strategic decision making, strategy pattern, deliberate/ emergent strategy and market orientation had a significantly positive impact on the performance of the banks. Therefore, the paper recommended that management of financial organizations should improve their usage of SMA techniques which is presently low, involve accountants in the strategic decision making process and employ more emergent and market oriented strategies in order to improve their performance.

**Contribution/ Originality:** This study contributes to the existing literature by examining the impact of strategic management accounting (SMA) techniques' usage and strategic choices on the performance of financial institutions in Nigeria.

### **1. INTRODUCTION**

In a period of globalization, strategic management is considered as the best accounting practice employed by business organization in a competitive environment (Abdel-Aziz & Fuqaha, 2014). Corporate performance and long term business survival depends on competitors' business and other control factors of the business environment. Corporate performance depends on the organization's competence to transform the resources to effectively and efficiently achieve the organizational goal (Nwadukwe & Timinepere, 2012). Therefore, strategic management is as a key process to achieve organizational strategic intents in a business environment.

The 21<sup>st</sup> century business environment seems to be quite different due to the greater uncertainty, dynamism and intense volatility caused by increasing technological developments, rapid information and disruptive new technologies (Chesbrough, 2003). The present day business organizations are exposed to a competitive business environment which is influenced by technological and political changes (Nikolaos, Maditinos, & Theriou, 2011). The complex business environment makes the customers to demand quality, flexible, fast and improved services. The increasingly competitive marketplace brings about innovation concerns and the exploitation of business opportunities in achieving a successful business goal in the immediate future (Nikolaos et al., 2011). The rapid growth of global economics, changes in technologies, market competitions, and ever changing business environment have caused banks to struggle for profitability and growth (Chai & Entebang, 2014). SMA techniques provide organizations with appropriate information for decision making in changing internal and external environment (Yap, Lee, Said, & Yap, 2014). Besides, SMA has become more popular due to the inability of the conventional management accounting to produce dynamic information for today's competitive environment (Bromwich & Bhimani, 1989; Guilding., Cravens, & Tayes, 2000).

Although most Nigerian studies have considered strategic management and organization performance and found significant relationship particularly in the banking sector (Adeyemi, 1992; Dauda, Akingbade, & Akinlabi, 2010; Muogbo, 2013; Olanipekun, Abioro, Akanni, Arulogun, & Rabiu, 2015; Owolabi & Makinde, 2012) only a few studies have examined the impact of SMATs on corporate performance in Nigeria. Again, while there are studies which have examined the impact of management accounting tools and techniques on organizational performance (Abdulhussien & Hamza, 2012; Al-Khadash & Feridun, 2006; Cinquini & Tenucci, 2010; Fowzia, 2011; Yap et al., 2014) a gap exists as there are no known studies which have investigated the relationship between SMATs usage, strategic choices and performance among Nigerian banks. Similarly, strategic choices have been found to have positive and significant relationship with performance (Carraresi, Mamaqi, Albisu, & Banterle, 2011; Gado, 2013). For instance, Gado (2013) found a stronger correlation between strategic choices and performance of textile industry concluding that strategic choices will turn again the ailing industry. Carraresi et al. (2011) found that strategic choice based on innovation had a positive effect on performance. Moreover, there is a research gap on the extent of usage of SMATs in Nigeria compare to other countries.

Therefore, the objectives of the paper include: (1) to examine the impact of the usage of SMA techniques on corporate performance of Nigeria banks (2) the impact of accountant's participation in the strategic decision making on corporate performance of Nigerian banks and (3) to investigate impact of strategic choices on performance of Nigeria banks. The rest of the paper is divided into four sections. The immediate section reviews the literature and develops the hypotheses about the relationship between SMA technique usage, accountants' participation in the strategic decision making, strategic choices and corporate performance. Section three considers the methodology while section four dwells on the data analysis, hypotheses testing and discussion of the results. The last section is the conclusion and recommendations. The study contributes to the extant literature by examining the impact of SMAT usage and strategic choices (by considering the three dimensions) on corporate performance of financial institutions in a developing economy like Nigeria.

### 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Strategic management accounting (SMA) is a process of using management accounting systems to make strategic decision and control activities by managers of corporate organizations (Cinquini & Tenucci, 2010). It involves the introduction of management accounting techniques into strategy management. Fowzia (2011) concluded that SMA practices recognize the challenges facing management of organization relating to customers, market, decision and activity. The author argued that SMA practices are taking a new shape in industries owing to market competitiveness. SMA integrates external and internal, with financial and non-financial information. It includes cost management approaches such as quality costing, target costing, life cycle costing, value chain analysis, activity based management, balanced score card etc. Bromwich (2000) says that SMA provides benefits that also to building and sustaining competitive advantage. It has been suggested that SMA strategic product costing and performance measurement, analyzes

firm's product markets and competitive market forces, and assesses the organizational strategies over a long time frame (Horngren, Datar, & Foster, 2005). SMA techniques have evolved owing to the pursuit for efficiency and productivity of businesses (Aksoylu & Aykan, 2013).

### 2.1. SMA Techniques Usage and Corporate Performance

Strategic management accounting deals with the whole operations which allow accountants and other business managers to move towards an outward-oriented perspective instead of an inward-oriented perspective (Kirli & Gümüş, 2011). Fowzia (2011) examined the relationship between SMA techniques with business strategy, and strategic effectiveness of 70 Bangladeshi companies. He found that the overall adoption rate was low to the medium level. Activity based costing, target and strategic costing have significant impact on their strategic effectiveness. Yap et al. (2014) found low level of adoption of SMA techniques by Malaysian unlisted companies. Mahama (2006) examined management control systems (MCS), cooperation and performance in strategic supply relationships. The empirical results showed that greater management accounting usage and corporate performance were positively related. Similarly, Agbejule (2005) investigated the relationship between management accounting systems (MASs) and perceived environmental uncertainty on managerial performance. The empirical result showed that the use of broad scope information has a significant positive effect on performance in prospectors' companies than in defenders' companies.

Ajibolade, Arowomole, and Ojikutu (2010) documented from their study on MASs, perceived environmental uncertainty and companies' performance in Nigeria that the increasing usage of SMA information for decision-making enhances effective organizational performance. Al-Mawali, Zainuddin, and Nasir Kader Ali (2012) showed that the level of usage of customer accounting information has a significant positive influence on organizational performance in Jordanian service sectors. Al-Mawali (2015) conducted a study on the SMA usage, environmental uncertainty and organizational performance in Jordanian quoted companies. The empirical results show that SMA usage has a significant positive. Aksoylu and Aykan (2013) examined the compliance of medium and large-size enterprises with SMAT as well as the effects of SMAT on the perceived performance of businesses using 202 accounting in Kayseri, Turkey. They found that 16 out of the 17 SMAT had above average usage and there were more than 50% compliance with 12 SMATs. Besides they found that SMAT usage had a positive and weak significant effect on the perceived performance. Similarly, the SMAT sub-dimension of strategic costing, customer and competitororiented techniques had a significantly positive but weak effect on perceived performance.

Chenhall and Langfield-Smith (1998) found a significant relationship between SMA tools and business performance in 140 manufacturing companies selected from the largest companies in Australia. Cadez and Guilding (2007) found a weak relationship between usage of SMA tools and 7-dimensional performance measures of the top 500 Slovenian. They found that "the application of SMA systems is not necessarily related to superior performance, but that superior performance is a product of an appropriate match between the contingent factors (business strategy, degree to which adopted strategy is deliberately formulated , market orientation and firm size." Said, Hui, Othmam, and Taylor (2010) found relationship of medium level between usage of SMA tools and financial/service quality performance of 109 Malaysian companies. Sener and Dirlik (2012) found a medium level relationship between SMAT usage and perceived performance of the top 500 and second largest 500 industrial companies in Turkey. Abdulhussien and Hamza (2012) study on SMA techniques in Romanian showed that major SMA techniques employed were ABC, value chain analysis, benchmarking and balance scorecard.

The SMA dimensions are made up of SMA techniques and accountants' participation in strategic decision making (Odia, 2018a). Cadez and Guilding (2008) classified the SMA techniques into five namely; strategic costing, strategic planning, management and control, strategic decision making, competitor accounting, and customer accounting. These five major techniques are subdivided into 17 techniques. The use of these techniques bring strategic ideology to management accounting practice. Table 1 shows the 17 SMATs and the categories.

Smat categories	Smat
1.Strategic costing	1. Attribute costing
	2. Life-cycle costing
	3. Quality costing
	4. Target costing
	5. Value chain costing
	6.Activity based costing
2.Strategic planning, control and	1. Benchmarking
performance	2. Integrated performance measurement like
	Balanced Scorecard
3.Strategic decision making	1. Strategic cost management
	2. Strategic pricing
	3. Brand valuation
4.Competitor accounting	1. Competitor cost assessment
	2. Competitor position monitoring
	3. Competitor performance appraisal
5. Customer accounting	1. Customer profitability analysis
	2. Lifetime customer profitability analysis
	3. Valuation of customers as assets

Table-1.	Categories	of SMA	techniques.

Source: Cadez and Guilding (2008).

Hypothesis 1 : SMATs Usage has no relationship with performance of Nigerian banks.

### 2.2. Accountants' Participation in Strategic Decision Making and Corporate Performance

Strategic accountants are accountants that are involved in strategic and proactive ways of analyzing companies business issues based on the data than the conventional way of carrying out their financial and operational functions (Coad, 1996). The management accountants help to provide useful information to managers for strategic decision making process. Many accountants are not been participating in decision-making processes in the organization. Although accountants perform mainly the traditional roles of corporate police, number crunchers and score keepers, they are taking up the modern roles like business partners and advisers, strategists and consultants today and also imparting significantly on organization's performance (Odia., 2018c; Odia. & Oke, 2018).

Hypothesis 2. There is no relationship between the participation of accountants in the strategic decision making and performance.

## 2.3. Strategic Choice and Corporate Performance

Strategic choice represents the best strategic option that helps organizations to achieve their objectives. Basically, the strategic options are evaluated based on their sustainability, feasibility and acceptability, and they are ranked in order of their potential to achieve desired objectives. A positive relationship have been found between strategic choices and organizational performance (Junqueira, Dutra, Filho, & Gonzaga, 2015).

Hypothesis 3: There is no relationship between strategic choice and corporate performance.

### 2.3.1. Strategic Pattern: (Defenders vs Prospectors)

Miles and Snow (1978) listed four major strategic typologies to include: prospectors, defenders, analyzers and reactors. Prospectors are causers of change in the industry. Firms following this strategy always seek for new products, and market opportunities and see how they can continue to bring more innovations to the industry. They are creators of utility (Miles & Snow, 1978). Defenders are almost opposite to the prospectors. The strategy of a defender is to offer relative stable set of service and ensure efficiency in the market (Narrow market). The defender looks at providing efficiency at the lower cost (Miles & Snow, 1978). Porter (1996) affirms that

prospectors are more pre-occupied with strategic position while defenders focus on operational effectiveness.

Analyzers tend to match prospector and defenders. They are not risk takers as they only move into the market after prospectors have proven the viability of the market. They are like copycats. They live by imitation and have that ability to respond to leading prospectors, but are more efficient E.g. IBM (Miles & Snow, 1978). Reactors are firms without a consistent strategy; they are either here or there it always difficult to categorize them clearly. In general most of them perform poorly as they are reluctant to commit themselves to a specific strategy (Miles & Snow, 1978). Reactors are firms without a consistent strategy; they are either here or there it always difficult to categorize them clearly. In general most of them perform poorly as they are reluctant to commit themselves to a specific strategy (Miles & Snow, 1978). Cinquini and Tenucci (2010) found that both defender and cost-leader-type of strategy are more willing to use SMA techniques in addressing cost information.

Hypothesis 3a: There is no relationship between the strategy patterns and performance.

### 2.3.2. Degree of Deliberate/ Emergent Strategy

A deliberate strategy is a conscious intended course of actions which involves discussions on a strategic action. It involves debating and deliberation of the strategy to pursue. On the other hand emergent strategy is a strategy form as a result of the ambiguous nature of strategic decisions in other to imply flexibility. Bromwich (2000) is of the view that deliberate strategy formulation orientation leads to greater participation of accounting in the process of strategic decision making. Fisher (1995) also posited that since strategic deliberations involves decision of what type and timing of product/market innovation. There is a tendency that the prospectors organization are best suited under this dimension of strategy because most prospectors decision are more deliberating in nature but not the same in the case of the defenders organization as the focus only on operational and efficiency seeking level.

Hypothesis 3b: There is no relationship between degree of deliberate and emergent strategy, and performance of banks.

#### 2.3.3. Degree of Market Orientation:

This philosophy tends to explain the level of dedication and concentration an organization puts in place in other to fulfill its primary goal by satisfying their customer needs or creating superior values for its customers. It includes the introduction of new or different things to respond to varying market conditions. It is "being more sensitive about the opportunities against the competitors whose market orientation level is lower" (Micheels & Gow, 2010). Guilding and McManus (2002) found a positive association between market orientation and customer accounting. They believed that manager with high market orientation perform well and better than their rivals as they see market orientation to be consistent with higher level of market performance. Tutar, Nart, and Bingöl (2015) found that proactive market, entrepreneurial and technology orientations were positively related to innovative capabilities and market performance.

Hypothesis 3c: There is no relationship between degree of market orientation and performance of Nigerian banks.

### 3. METHODOLOGY

The population consists of top management employees of 13 deposit money banks in Benin Metropolis, Edo State. Given a population of senior staff population of 432 in 2016 see Table 1. To determine our sample size using Yaro Yamane, a total two-hundred and eight (208) employees copies of questionnaire was administered to staffs of money deposit banks in Benin metropolis in Edo State, Nigeria. But only one-hundred and fifty-six (156) copies of questionnaire were duly filled and returned. This represents a response rate of (75%). The high response rate was attributed to the fact that the researcher had contacts in the study area that facilitated in the data collection process.

Bank	No. of	Supervisors	Senior	Middle	Branch	Total
	branches		staffs	managers	managers	
First Bank	5	10	39	10	5	69
Eco bank	8	11	19	24	8	70
Fidelity	6	24	6	6	6	48
Diamond	6	13	15	0	6	40
GTB	2	9	12	4	2	29
UBA	10	20	21	11	10	72
Access	2	6	6	13	2	29
Union	6	25	15	15	3	64
Sterling	1	2	5	2	1	11
Total	46	120	138	85	43	432

Table-1. Population of respondents.

Source: Field survey (2016).

### 3.1. The Research Instrument

The questionnaire was constructed based on Cadez and Guilding (2008); Cinquini and Tenucci (2010) and, Aksoylu and Aykan (2013) to cover the objectives and hypotheses of the study. The questionnaire was divided into two parts. Parts one contains the background information of the respondents. Part two was classified into four sections. Section one consist of questions rated on a 5-point scale on the usage of the 17 SMA techniques. Section two consisted of questions rated on a 5-point Likert scale on accountants' participation in strategic decision making. Section three consist of questions on strategic choices which was made of type of strategy, degree of deliberate and emergent strategy, and market orientation. Section four consist of questions on a 5-point Likert scale on corporate performance. The Cronbach alpha tests of reliability conducted using SPSS 21.0 showed values which exceeded the recommended minimum of 0.700 as follows: strategic management accounting techniques usage 0.732; accountants' participation in strategic decision making 0.801; strategic choices 0.755 and corporate performance 0.744.

#### 3.2. Models Specification

Based on Cadez and Guilding (2008); Cinquini and Tenucci (2010) and Aksoylu and Aykan (2013) two models are depicted to analyze the impacts ond SMATU and strategic choices on financial performance as follows:

 $CPERF = \alpha_0 + \alpha_1 SMATU + \alpha_2 ACCTP + \alpha_3 SCHOICE + U_t$ 

Equation 1 relates the corporate financial performance to the aggregated value of SMATU and strategic choices whereas eguation (2) examines the relationship between corporate financial performance and aggregated SMATU and dimensions of strategic choices:

 $CPERF = \alpha_0 + \alpha_1 SMATU + \alpha_2 ACCTP + \alpha_3 STRATYPE + \alpha_4 EMESTR + \alpha_5 MKTORIENT + U_t$ (2)

Where:

CPERF = Corporate performance.

SMATU = Strategic management accounting techniques usage.

ACCTP = Accountant participation in strategic decision making.

SCHOICE = Strategic choices.

STRATYPE = Strategy type.

EMESTR = Deliberate and emergent strategy.

MKTORIENT = Market orientation.

Ut = Error term.

 $\alpha_0 = \text{constant.}$ 

 $\alpha_1, \alpha_2, \alpha_3 = \text{coefficients of the explanatory variables.}$ 

(1)

#### 3.3. Operationalization and Measurement of Variables

Corporate Performance: Corporate performance consisted of 4 financial and non-financial items : (1) Return on Investment (2) Return on Assets. (3) Customer satisfaction and (4) New product development. It was measured on a 5-point ordinal scale.

Strategic Management Accounting Techniques (SMAT) Usage: Following Guilding. et al. (2000); Cadez and Guilding (2007); Cadez and Guilding (2008) and Cinquini and Tenucci (2010) the measure of the degree of SMA techniques usage was structured on 5-point scale from Not at All (1) to Great Extent (5).

Accountant Participation in Strategic Decision Making: It addressed the question of how changing organizational discipline enhances accountant's participation in strategic decision making process. The five statement was are structured on 5-point Liker scale based on Cadez and Guilding (2008).

Strategic Choices: The strategic choices comprise:

(1) Type of business strategy (strategy pattern): Following Miles and Snow (1978); Snow and Hrebiniak (1980) and Shortell and Zajac (1990) the instrument asks which of the two description (defender and prospectus) best describes the financial institutions. Besides, following Golden (1992) and Abernethy and Brownell (1999) the respondents were asked to place strategy types along a five - point from "1" (defender) to "5" (prospector).

(2) Degree to which strategy is deliberately or emergent formulated: Three statements based on Mintzberg (1987) and used by Cadez and Guilding (2008) was used to measure this variable.

(3) Degree of market orientation was measured using Guilding and McManus (2002) on a 5 point scale using four statements.

The responses from the administered questionnaire were analyzed using descriptive statistics, percentage, correlation and multiple regression analyses. While the Pearson correlation matrix was used to examine the relationship between the dependent and independent variables, and following prior study such as Cadez and Guilding (2007); Cadez and Guilding (2008) and Cinquini and Tenucci (2010) the multiple regression method was employed to test the hypotheses if the independent variables had significant impact on the dependent variable. The Variance Inflation Factor (VIF) of less than 10 showed the absence of multi-collinearity among the variables.

### 4. DATA ANALYSIS AND DISCUSSION OF RESULTS

The purpose of this study was to examine the impact of strategic management accounting techniques on corporate performance of financial institutions. First, the responses from the questionnaire distributed is analyzed to show the categories of respondents, usage of SMATS.

#### 4.1. Demographic Characteristics of Respondents

The demographic characteristic of respondents is presented in Table 2.

Table 2 shows the demographic characteristics of respondents. It would be revealed from the above table that 104 (66.7%) were males and 52 (33.3%) were females. This implies that majority of the respondents were males. On the basis of age, 87 (55.8%) of the respondents were 20-25 years, 53 (34.0%) of them were aged 26-30 years, 15 (9.6%) of the respondents were aged 31-35 years and 1 (0.6%) respondent was 36-40 years. This reveals that most of the respondents were in the age range 20-25 years. On marital status of the respondents, 14 (9.0%) were married, 40 (25.6%) of the respondents were single, 55 (35.3%) of the respondents were separated, 43 (27.6%) of the respondents were widower/widow and 4 (2.6%) of them were divorced. This means that majority of the respondents possessed OND certificate, 95 (60.9%) of the respondents possessed either HND or BSC degree, 27 (17.3%) possessed master degree and 3 (1.9%) or BSC degree holders.

### 4.2. Usage of SMAT

Table 3a shows the response regarding the 17 SMATs. A mean of below 2.50 indicates that there is low usage of all the SMATs by financial institutions. However, the five topmost SMATs used were: brand valuation, life cycle costing, competitor's cost assessment, integrated performance measurement and strategic costing. The least SMATs used by the banks include: Quality costing,

target costing, value chain costing, benchmarking, competitor performance appraisal, and customer accounting (valuation of customer asset and lifetime customer profitability analysis).

Category	Frequency	Percentage (%)
Gender:		
Male	104	66.7
Female	52	33.3
Age:		
20 - 25 years	87	55.8
26-30 years	53	34.0
31-35 years	15	9.6
36-40 years	1	0.6
41 Years and above	-	-
Marital status:		
Married	14	9.0
Single	40	25.6
Separated	55	35.3
Widowed	43	27.6
Divorced	4	2.6
Educational qualification:		
OND	31	19.9
HND/BSC	95	60.9
Masters	27	17.3
PHD	3	1.9
Work experience		
0-5 years	51	32.7
6-10 years	71	45.5
11-15 years	14	9.0
16 years and above	20	12.8
Position:		
Supervisor	65	41.7
Senior staff.	59	37.8
Middle management	31	19.9
Branch manager	1	0.6

 Table-2.
 Demographic characteristics of respondents.

### Table-3a. SMA techniques usage.

SMATs	Mean	Rank
Attribute costing (AC)	1.62	8
Life Cycle costing	1.73	2
Quality costing	1.44	15
Target costing	1.44	15
Value chain costing	1.44	15
Benchmarking	1.56	12
Integrated performance measurement	1.71	4
Strategic costing	1.70	5
Strategic pricing	1.68	6
Brand valuation	1.75	1
Competitor cost assessment	1.72	3
Competitor position monitoring	1.62	8
Competitor performance appraisal	1.51	14
Balance scorecard technique	1.61	10
Customer profitability analysis	1.67	7
Lifetime customer profitability analysis	1.58	11
Valuation of customer asset	1.56	12

Source: Field survey (2017).

Again, a comparison of the usage of SMATs in other countries like Italy, USA, Slovenia and Australia from prior studies in Table 3b revealed that the usage of SMATs in Nigeria is lower than the usage in Italy and the USA. There seems to be much low usage of SMAT regarding quality costing, targeting costing, value chain costing and bench marking, competitors' position monitoring, competitors' performance appraisal in Nigeria compare to the other countries. Strategic costing, strategic pricing and brand valuation is also very low in Nigeria.

### 4.3. Accountants Participation in Strategic Decision Making

Table 4 shows that the participation of accountants in the strategic decision making include mostly in some small measures as regards: evaluating options, generating options, developing details about options, taking necessary actions and problem identification and objectives proposition. The low mean values indicate a low level participation. This supports (Odia., 2018c) that the roles of the management accountants are mainly traditional but are gradually tilting towards the modern roles involving participation in strategy formation and decision making.

### 4.4. Strategic Choices

Table 5 shows the strategy type with an overall mean of 3.86 tends towards the prospector's type. Besides, the emergent strategy and market orientation was very low.

### 4.5. Corporate Performance

Table 6 shows that performance are below average. The performance indicators included return on investment, return on assets, customer satisfaction.

#### 4.6. Test of Hypotheses

### 4.6.1. Descriptive Statistics

Table 7 shows the descriptive statistics for the performance and other independent variables including their mean and standard deviation. The mean for SMATU of 2.902 shows that the SMATs are moderately used by financial institution. The accountant's participation in the strategic decision making is also very low with a mean of 1.59. The strategy type gravitates towards prospector's type with a mean of 3.86. The performance is equally low at a mean of 1.29.

### 4.6.2. Correlation Matrix

Table 8 revealed the Pearson correlation matrix between SMAT usage, strategic choices and organizational performance. The correlation coefficient of SMATU had a moderate and negative correlation with PERF. This means that the SMATs usage leads to a decrease in organizational performance. The medium and weak relationship between SMAT usage and performance tend to support the prior findings by Said et al. (2010); Cadez and Guilding (2008); Sener and Dirlik (2012) and Aksoylu and Aykan (2013).

However, the participation of accountants in strategic decision making had a positive and moderate correlation with performance (PERF =0.423). This shows that active participation of accountant in strategic decision making would lead to an increase in organizational performance. Also for strategic choices, whereas emergent strategy and market orientation had positive coefficients that were strongly correlated with organizational performance, the strategy type or pattern is negative and moderately correlated with performance.

S/N	Study	This study	Rank	Cinquini and Tenucci (2010)	Rank	Cravens and Guilding (2001)	Rank	Cad	ez and C	Guilding (20	07)
	Country	Nigeria		Italy		USA		Slovenia	Rank	Australia	Rank
	Sample size/respondents	208/156		215/92		915/120		388/13 4		298/26	
	Scale used	1-5 ª		1-5		1-7		1-7		1-7	
Α	SMAT and usage	Mean		Mean		Mean					
1	Attribute costing (AC)	2.27	8	NA		NA		NA		NA	
2	Life Cycle costing	2.42	2	2.92	11	2.73	10	2.90	10	2.21	8
3	Quality costing	2.02	15	4.12	4	3.07	9	4.31	2	1.67	10
4	Target costing	2.02	15	3.62	6	3.19	7	3.64	8	2.00	9
5	Value chain costing	2.02	15	3.43	8	3.15	8	3.90	6	2.63	7
	ABC/ABM	NA		3.27	9	3.54	6	NA		NA	
6	Benchmarking	1.56	12	3.61	7	4.59	2	3.92	5	4.36	2
7	Integrated performance measurement	1.71	4	3.17	10	4.00	5	3.94	4	2.83	6
8	Strategic costing	1.70	5	NA		NA		NA		NA	
9	Strategic pricing	1.68	6	NA		NA		NA		NA	
10	Brand valuation	1.75	1	NA		NA		NA		NA	
11	Competitor cost assessment	1.72	3	3.95	5	4.09	4	3.38	9	3.96	4
12	Competitor position monitoring	1.62	8	4.44	3	4.93	1	4.31	2	4.40	1
13	Competitor performance appraisal	1.51	14	4.69	2	4.50	3	4.47	1	4.04	3
14	Balance scorecard technique	1.61	10	NA		NA		NA		NA	
15	Customer profitability analysis	1.67	7	4.86	1	NA		3.90	6	3.50	5
16	Lifetime customer profitability analysis	1.58	11			NA		1			
17	Valuation of customer asset	1.56	12			NA		1			

Table-3b. Comparison of strategic management accounting techniques (SMAT) usage.

a- Mean based on five scale of GE=Great Extent- 5, M=Moderate-4, SE=Small Extent -3, VS=Very Small-2, NA=Not at All-1Converted to a 7-point scale. The comparison of results follows Dawes (2002).

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Table-4. Accountant's	particir	pation in	strategic c	lecision r	nakino
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S/N	Items	СТ	MT	UN	ST	NA	Mean	Rank
В	Accountant's	(%)	(%)	(%)	(%)	(%)		
	Participation in	· · /	· /					
	Strategic Decision							
	Making involves:							
1	Identifying problems	-	-	4(2.6)	13(8.4)	114(73.1)	1.16	5
	and proposing							
	objectives in your							
	organization							
2	Generating options	-	7(4.5)	23(14.7)	36(23.1)	90(57.7)	1.65	2
3	Evaluating options	1(0.6)	1(0.6)	31(19.9)	37(23.1)	86(55.1)	1.69	1
4	Developing details	2(1.3)	1(0.6)	17(10.9)	49(31.4)	87(55.8)	1.60	3
	about option in your	. ,	. ,	. ,	. ,			
	organization							
5	Taking the necessary	-	6(3.8)	4(2.6)	45(28.3)	101(64.7)	1.47	4
	actions to put changes							
	into place							

Note: CT=Completely True, MT=Mostly True, UN= Undecided, ST= Slightly True, NA=Not at All.

		Table	-5. Strategi	e choices.			
С	Strategic choices	1	2	3	4	5	Mean
i	Types of Strategy: Defender (1) Prospector (5)						
1	Your organization uses business strategy	35 (22.4)	1(0.6)	4 (2.6)	27 (17.3)	89 (57.1)	3.86
	Items						
ii	Deliberate or emergent strategy	SA	А	UN	D	SD	
1	Strategic decision makers usually think through everything in advance of strategic action in your organization	-	$\begin{pmatrix} 1 \\ (0.6) \end{pmatrix}$	2 (1.3)	42 (26.9)	$     \begin{array}{r}       111 \\       (71.2)     \end{array} $	1.31
2	Strategic intention are realized seldomly with little or no deviation in your organization	2(1.3)	2 (1.3)	11 (7.1)	44 $(28.4)$	96 (61.9)	1.52
3	Strategic actions are usually develop in the absence of strategic intention in your organization	$\frac{2}{(1.3)}$	4(2.6)	11 (7.1)	41 (26.3)	98 (62.8)	1.53
iii	Market orientation						
1	Your organization has a strong understanding of their customers	1 (0.6)		$9 \\ (5.8)$	39 (25.0)	107 (68.6)	1.39
2	The functions in your organization work closely tog ether to create superior value for their customers		1 (0.6)	4(2.6)	49 (31.4)	$102 \\ (65.4)$	1.38
3	Your organization has a strong market orientation				49 (31.4)	101 (64.7)	1.39

Note: SA=Strongly Agree, A=Agree, UN=Undecided, D=Disagree, SD=Strongly Disagree.

		Tuble	<b>0.</b> I CHOITH	uneer			
S/N	Items	EX	AB	Α	BA	VP	Mean
D	Performance	(%)	(%)	(%)	(%)	(%)	
1	Return on investment (ROI)				21(13.5)	135(86.5)	1.13
2	Return on assets (ROA)			3(1.9)	39(25.0)	114(73.1)	1.29
3	Customer satisfaction			5(3.2)	35(22.4)	116(74.4)	1.29
4	New product development		4(2.6)	3(1.9)	49(31.4)	100(64.10	1.43

#### Table-6 Performance

Note: EX=Excellent, AB= Above Average, A=Average, BA=Below Average, and new product development VP=Very Poor.

#### Table-7. Descriptive statistics.

Variables	Ν	Minimum	Maximum	Mean	Std. dev	Actual range	VIF
Smatu	158	1.00	6.17	2.9022	1.26460	1-5	1.241
Acctp	158	1.00	4.00	1.5976	.80904	1-5	8.831
Stratype	156	1.00	5.00	3.8590	1.62421	1-5	10.703
Emerstrat	156	1.00	3.67	1.4530	.62670	1-5	3.855
Mktorien	156	1.00	2.75	1.4006	.52107	1-5	3.750
Perf	156	1.00	2.25	1.2853	.41197	1-5	

#### Table-8. Correlation analysis.

Variable	Smatu	Acctp	Stype	Emerstr	Mktorien	Perf
Smatu	1.000					
Acctp	-0.177	1.000				
Stratype	0.192**	-0.941***	1.000			
Emerstr	-0.351***	0.662***	-0.729***	1.000		
Mktorien	-0.414***	0.647***	<b>-</b> 0.699***	0.833***	1.000	
Perf	- 0.448***	0.423***	-0.446***	0.708***	0.845***	1.000

#### 4.7. Regression Analysis

The regression results are presented in Table 9.

The results in Model 1 and 2 revealed that SMATU had a significantly negative impact on corporate performance. This means that SMAT usage would lead to decrease in corporate performance. The results in Model 1 showed that accountants' participation in strategic decision making had a significantly positive impact on corporate performance at 1% level of significance. The positive coefficient of 0.27 means that accountants' participation in strategic decision making and corporate performance was positively and significantly related to performance. The regression results also showed that strategic choices (SCHOICE) had a positive and a significant impact on corporate performance at 5% level of significance. The positive coefficient of 0.16 accounted for 16% increase in corporate performance. Therefore this means that strategic choices and corporate performance were positively and significantly related.

In Model 2 where the strategic choices were disaggregated into strategy types or patterns, deliberate/emergent strategy and market orientation, SMATU stills had a significant and negative impact on PERF while ACCTP is positive and insignificantly associated with PERF. The strategic choices- STRATYPE, EMESTR and MKTORIENT are all positive and significantly associated with PERF.

#### 4.8. Discussion of Results

The multiple regression results revealed that SMA technique usage had a significant negative impact on corporate performance at 5% level of significance. The result is not consistent with the findings of Al-Mawali (2015); Chenhall and Langfield-Smith (1998) and Aksoylu and Aykan (2013) that SMA usage has a significant positive effect on organizational performance. Therefore, we reject hypothesis one  $(H_1)$  that SMAT usage has no relationship with corporate performance of Nigerian banks.

Models	Model 1	Model 2
Variables	PERF	PERF
С	3.75***	-0.383
t-value	(7.02)	(-1.511)
p-value	0.000	0.133
SMATU	-0.24 **	-0.026 *
	(-1.99)	(-1.859)
	0.048	0.065
ACCTP	0.27***	0.085
	(3.67)	(1.362)
	0.003	0.175
SCHOICE	0.16 **	-
	(2.15)	
	0.033	
STRATYPE	-	0.119 ***
		(3.661)
		0.000
	-	0.114 **
EMERSTRAT		(2.250)
		0.026
	-	0.705 ***
MKTORIEN		(11.782)
		0.000
$\mathbb{R}^2$	0.122	0.771
R-2	0.104	0.763
F- Stat	7.001***	100.774 ***
p-value	0.000	0.000

Table-9. Regression results.

Accountants' participation in strategic decision making had a significant positive impact on corporate performance at 1% level of significance. The result is consistent with the findings of Ofoegbu and Joseph (2013) that a significant relationship exist between the organizational performance and those organizations that encourage employee to be involved in their decision making. Therefore, we reject the null hypothesis two (H<sub>2</sub>) that accountant participation in strategic decision making does not have a direct association with the performance of Nigerian banks. Strategic choices had a significant positive impact on corporate performance at 5% level of significance. The result is consistent with the findings of Carraresi et al. (2011). Gado (2013); and Dauda et al. (2010). Therefore, we reject the null hypothesis (H<sub>3</sub>) that strategic choices do not have a direct impact on the performance of Nigerian banks.

Therefore, a summary of the key findings indicates that : 1. SMA techniques usage are very low and they have a significant negative impact on performance. 2. Accountants' participation in strategic decision making is low and had a significant positive impact on the performance of Nigerian banks, and 3. Strategic choice (strategy pattern, deliberate/emergent strategy and market orientation) have positive and significant impact on corporate performance.

## 5. CONCLUSION AND RECOMMENDATIONS

The paper examined strategic management accounting techniques usage, strategic choices, and performance of Nigerian banks in Benin metropolis, Edo State. It concludes that SMATs usage is low and they have negative and significant impact on the performance of money deposit banks in Benin metropolis while accountants' participation in strategic decision making and strategic choices had positive and a significant impact on corporate performance respectively. Therefore, the following recommendations were put forth:

- 1. Management of financial institutions or banks should be concerned with the types of SMA techniques employed because of its adverse effect on corporate organizations.
- 2. They should involve accountants more in decision making process in order to improve performance of the organizations.
- 3. Management of banks should employ the best strategic options and market orientation strategies that would enhance their performances.

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