

**EFFECT OF BUDGETING PRACTICES ON FINANCIAL PERFORMANCE OF
MANUFACTURING SMALL AND MEDIUM ENTERPRISES IN NAIROBI
COUNTY, KENYA**

Marion Mbogo
Chandaria School of Business
United States International University-Africa
Email: mmbogo@usiu.ac.ke

Clement Olando
School of Business and Economics
Mount Kenya University
Email: olandock@gmail.com

Jimmy Macharia, PhD
School of Science and Technology
United States International University-Africa
Email: kmacharia@usiu.ac.ke

ABSTRACT

Prior studies have asserted that small and medium-sized enterprises (SMEs) have grown and represented most businesses in Kenya. However, these studies continue to establish that 70% of Small-to-Medium sized enterprises (SMEs) in Kenya fail within their first three years of existence. One weakness postulated as a possible cause for this failure rate is poor financial performance. Existing literature has highlighted management accounting practices deployment, including budgeting, costing, and strategic management accounting practices. This is one possible remedy from an array of interventions. This paper, therefore, aims to investigate the effect of budgeting practices, including planning for cash flows (BP), controlling cash flows (BC), resources allocation (BRA), activity coordination (AC), and monitoring financial position (MFP) on Financial Performance (FPM) of Manufacturing Small and Medium Enterprises in Nairobi County, Kenya. This research adopted a descriptive research design that used data collected using a self-administered cross-sectional survey. A questionnaire from a randomly selected sample of 156 manufacturing SMEs in the City of Nairobi data was analyzed through structural equation modelling. The results revealed that budgeting practices positively and significantly influence manufacturing SME's financial performance. The findings of this study suggest that the financial performance of a manufacturing SME can be improved by deploying strategic action in budgeting practices in the form of planning for cash flows (BP), controlling cash flows (BC), resources allocation (BRA), activity coordination (AC) and monitoring financial position (MFP).

Keywords: Budgeting Practices, Planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC), and Monitoring Financial Position (MFP)

1. INTRODUCTION

The International Federation of Accountants (IFAC) (1998) shows that management accounting evolved through four stages. Stage one was prior to 1950, where the focus was mainly on the analysis of the financial statement, ratio analysis, and budgeting. Ahmad (2017), in a study in Malaysian SMEs, stated that the use of traditional management accounting practices (MAPs) like costing, budgeting, and performance management systems (PMS) was greater than for more advanced MAPs such as strategic management accounting (SMA). The use of MAPs in manufacturing companies is mostly for the provision of information for decision-making followed by strategic analysis, budgeting, performance evaluation, and costing, among others. According to Gichaaga (2014), some measures of performance, such as Return on Equity (ROE) and Return on Assets (ROA), are found to have increased as a result of the application of MAPs.

King, Clarkson, and Wallace (2010) carried out research to determine the relationship between budgeting and firm performance in small healthcare businesses in Australia. The study objectives were to investigate the relationship between contextual factors identified from contingency-based research, the adoption and extent of use of budgets, and business performance within the Australian primary healthcare setting. Unlike their study that was in healthcare and in the developed world, the focus of the current paper is manufacturing SMEs in the context of a developing nation.

2. PROBLEM STATEMENT

Small and medium enterprises in Kenya indicate high rates of business failure. Although there are a number of support programmes for SMEs provided by the government and other players in the sector, the high failure rate is still persistent, indicating poor financial performance. According to Douglas et al. (2017), 70% of Small-to-Medium sized enterprises (SMEs) in Kenya fail within their first three years of existence. Moreover, the problem of SME failure rate is widespread across many nations of the earth. For example, in the UK, 50% of business start-ups fail within five years (Douglas et al., 2017). In South Africa, SMEs failure rate is projected to be between 70% and 80%, with a 70% failure rate within the first year of operation (Rabie, Cant, & Wiid, 2016). Despite this high failure rate, governments all over the world have continued to underscore the importance of SMEs and place high expectations in their contribution to the Gross Domestic Product(GDP), job and wealth creation, economic development, and stability by employing and engaging the huge numbers of unemployed youths particularly in developing Nations(Douglas et al., 2017; Dalberg, 2011). Consequently, governments, development partners, and sector experts have been grappling with this challenge of high SME failure rate. A myriad of interventions and support programs have been proposed and tried with varying degree of success, including training (Rabie et al., 2016), and tax incentives (Yoshino & Taghizadeh-Hesary, 2016), budgeting practices (Adu-Gyamfi, Yusheng, & Chipwere, 2020), cost accounting practices (Kariyawasam, 2018), strategic management accounting practices (Okoye & Akenbor, 2012) among others. Unfortunately, the problem of the high SME failure rate is still persistent. Since the manufacturing SMEs have the largest contribution for opportunities for job and wealth creation, as well as contribution to GDP, its financial performance and consequent success has the most probable effect on a national economy. Thus, this study chooses to investigate the effect of Budgeting Practices on the Financial Performance of Manufacturing Small and Medium Enterprises in Nairobi County, Kenya.

Abbadi, (2013) asserts that their results indicate a lack of using budgeting practices in the developing countries and points out improvement which would take place in terms of the adoption of more advanced budgeting practices. However, the Abbadi, (2013) study focused on financial institutions in Jordan. The current study focuses on manufacturing SMEs in Kenya. Moreover, the measures of central tendency are used in the analysis of their variables, while the current study used structural equation modelling to investigate the study variables namely Planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC) and Monitoring Financial Position (MFP). Likewise, the study by Adu-Gyamfi et al. (2020) study in Ghana differs from the current study in that they focused on organizational performance as opposed to financial performance, used regression analysis, and examined a number of other variables that are not measurements of budgeting practices which is the primary focus of this paper. Consequently, the paper focuses on the Effect of Budgeting Practices on Financial Performance of Manufacturing Small and Medium Enterprises in Nairobi County, Kenya.

3. LITERATURE REVIEW

3.1 Theoretical Foundation of Contingency Theory

Contingency is defined as any variable that regulates the effect of firm characteristics on firm performance and presumes that different circumstances require different solutions and different organizational structures (Dobák & Antal, 2010) cited in Kihara (2016). The theory postulates that there is no best way of organizing, leading, directing, or making decisions in a company but that firms take the ideal course of action depending on their existing internal and external circumstances (Abba, Yahaya, & Suleiman, 2018). Additionally, Abba, et al (2018) state that the adoption of contingency theory in accounting resulted from conflicting research results that could not adequately be resolved within a universal framework. Therefore, in the MA context, the contingency theory approach assumes that there is no universally acceptable accounting information system that fits all organizations in all circumstances. According to its requirements, each organization applies its own unique MAPs (Ajibolade, 2013; Otley, 2016a). Principally, every organization implements its own management accounting practices.

3.2 Empirical Literature Review

A budget is a detailed estimate of future transactions which are articulated in terms of human resources, physical quantities, money, or all (Kang'aru & Tirimba, 2018). The principle of a budget is that it is a goal established for management to operate within, accomplish or exceed it. In general, the underpinning principle for budgeted financial statements is detail budgets. Detail budgets comprise of production forecasts, sales forecasts, and other approximations in support of the financial proposal. According to Zwikael and Sadeh, (2007), a budget includes financial planning and indicates the essential cash flow for each time period. They argue that consistent budget plan review ought to focus more on the role level rather than the activity level.

3.2.1 Budgetary Planning

Nair (2020) and Agbenyo et al. (2018) define budgetary planning as the process of estimating future events and how activities should be handled based on predetermined targets set by the firm. Kibunja (2017) study on the budgetary process and financial performance of Murang'a county government in Kenya used a sample of 83 staff. The study established that budgetary planning, implementation, monitoring, and evaluation had a significant influence on the

financial performance of the county government. Wijewardena and De Zoysa (2001) in Yang, (2010) investigated the impact of financial planning and control on the performance of SMEs in Australia and argue that the impact of budgetary control and budget planning on performance may differ from company to company subject to the degree of its use. In their study, two measures of financial performance indicators are return on investment and sales growth. The study measures financial planning in four items, namely perceptions on return on investment (Net income divided by total investments), return on assets (Net income divided by total assets), the percentage change in operating profit before tax, and percentage change in net profit margin. This study collected data from 2,000 manufacturing SMEs in Australia. The findings reveal a positive and significant influence of budget planning and budgetary control on sales growth. The study by Siyanbola, (2013) investigating the impact of budgeting and budgetary control on the performance of manufacturing companies in Nigeria established that there is a significant relationship between budgetary planning and firm performance. Likewise, Nair, (2020) studied 200 SME business owners in Yemen and affirmed a significant relationship between budgetary control, budgetary planning, and SME financial performance in Yemen. However, in Nair (2020) study the focus was not on manufacturing SMEs. The study by Mbuthia and Omagwa (2019) on budgetary control established that budget planning had the most significant effect on selected commercial banks' financial performance in Kenya, followed by budget implementation, budget review, and budget control. However, their study was on commercial banks in Kenya as opposed to manufacturing SMEs. Through this review, it is hypothesized that:

Hypothesis 1: there is a significant positive relationship between budgetary planning, and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.2 Budgetary Control

Myint (2019) defines budgetary control as the procedure of developing a disbursement plan and occasionally linking actual spending against that budget to control whether spending behavioural patterns need to be regulated accordingly. Koech, (2015) studied the effect of budgetary control on the financial performance of manufacturing firms in Kenya, where one of their findings was that budgetary control determines budgetary skills and financial skills to make better decisions. Further, Koech (2015) identifies how and when to track the financial metrics for the firm which aid in understanding budgets and performance indicators as communication tools. However, the performance was general as opposed to financial performance, which is the focus of this study. The study by Mbuthia and Omagwa, (2019) on the effect of budgetary control on the financial performance of selected commercial banks in Kenya established that budget control had a positive and significant effect on financial performance. However, their study was on commercial banks in Kenya as opposed to Manufacturing SMEs. A study on Effect of budget and budgetary control on firms performance: a case study of the East African Portland Cement Company Limited, concluded that there was a high positive correlation of 54.4% between budgetary control and firm's financial performance measured in terms of profit before (Nafisatu, 2018). However, the study sample was 45, and it was based on a case study of one manufacturing company. The study by Siyanbola, 2013) posted a significant relationship between budgetary control and firm performance in Nigeria.. Thus, it is hypothesized that:

Hypothesis 2: there is a significant positive relationship between budget control and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.3 Resource allocation

According to Green et al. (2000), resource allocation could be defined as the general allocation of financial resources to devolved management units or departments within the government, an organization or a company. It is closely linked to budgeting, which focuses on statements of specific spending plans within this general allocative upper limit. Economic Value Added (EVA) measures whether the operating profit is sufficient enough to cover the cost of capital. EVA measurement also requires a company to be more careful about resource mobilization, resource allocation, and investment decisions (Malik, 2013). Additionally, EVA effectively measures the productivity of all aspects of production. Atsmon et al. (2016), in their book titled "Resource allocation: Selected articles from the Strategy and Corporate Finance Practice," posts that due to the richness and complexity of the resource allocation issues, variances in the relationship between long and short-term resource allocations and financial performance is likely to be a fruitful area for further research. Thus, it is hypothesized that:

Hypothesis 3: there is a significant positive relationship between resource allocation and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.4 Activity coordination

Romenti and Illia (2013) define activity coordination as the continuous alignment among corporate values and daily collective behaviours. Zhu et al. (2012) argue that the coordination structure for allocation of organizational resources to handle complex tasks of activity coordination is necessary for enhancing efficiency and environmental performance gains. Activity coordination supports firm performance, together with access to further resources for research and development (R&D)(Lundberg & Andresen, 2012). In the study by Hara, (2020) it is argued that activity coordination is a central issue in the activity-link dimension and that among firms' activities coordination is assisted by inter-firm interaction and information sharing. Prior studies posit that every activity of the internal functions of the firm should be regarded as a value-adding activity. Additionally, coordination of these activities plays a major role in bringing the value-added services to the end-user (Hussain, Shah, & Akhtar, 2016). Budgets support the coordination of all ranges of activity, section units and division's activities. This is because they integrate a plan that drives the firm toward attaining the set goal (Klimaitienė & Ramanauskaitė, 2019). Generally, the activity coordination, control, and direction of service and material flows through end-to-end steps that are executed according to managerial supervision (Kimpimäki, 2014). In today's world of greater digitization, electronic hierarchies will continue evolving to facilitate integrated activity coordination mechanisms and processes across organizational borders by permitting uninterrupted sharing of information effortlessly using online platforms and systems.(Kimpimäki, 2014). Thus, it is hypothesized that:

Hypothesis 4: there is a significant positive relationship between activity coordination and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.5 Monitoring financial position

The results of the study by Mandela, (2014) on the effect of budgetary control process on firm financial performance: a case study of Nzoia Sugar Company, Kenya, indicated that there was no significant relationship between the budget monitoring and the financial performance. According to The World Bank Group (2007), budget execution encompasses both activities related to the implementation of policies and tasks related to the administration of the budget.

In governments, the ministry of finance should have the responsibilities of administering the system of release of funds, control of budget execution, preparing the in-year financial plan, and preparing in-year budget revisions. Additionally, it should monitor expenditure flow; managing the central payment system (if any); administering the central payroll system (if any); or supervising government bank accounts, and preparing accounts and financial reports (The World Bank Group, 2007). Moreover, there is scanty published literature on the influence of monitoring financial position or budget monitoring on firm's financial performance. Consequently, it is hypothesized that:

Hypothesis 5: there is a significant positive relationship between monitoring financial position/ budget monitoring and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.6 Financial Performance

Financial performance measures are quantitative performance measures calculated from the financial statements and are highly accepted because the information is readily available from a firm's financial statements (Ahmad, 2012). The measures include return on equity (ROE), return on assets (ROA), return on investments (ROI), sales volume, profitability, market share, firm reputation, and established corporate identity (Taticchi, Tonelli, & Cagnazzo, 2010). These performance measures are applicable to and mostly used by large companies but are not always appropriate for SMEs. Although extensive research has been carried out on financial performance measurement systems in large organizations, available research relating to SMEs is low (Anggadwita & Mustafid, 2014). Thus, it is hypothesized that:

Hypothesis 6: there is a significant positive relationship between budgeting practices and the financial performance of Manufacturing SMEs in Nairobi County, Kenya.

3.2.7 Conceptual Framework

Sekaran & Bougie (2016) refer to a conceptual framework as a written description or schematic diagram that helps the reader to visualize the relationships between the theorized variables. Figure 1 shows the conceptual framework with the independent variables, Planning for Cash flows (BP), Controlling Cash flows (BC), Allocating Resources (BRA), Coordinating Activities (AC), Monitoring Financial Position (MFP); endogenous variable Budgeting Practices (B_P), and the dependent variable Financial performance (FPM).

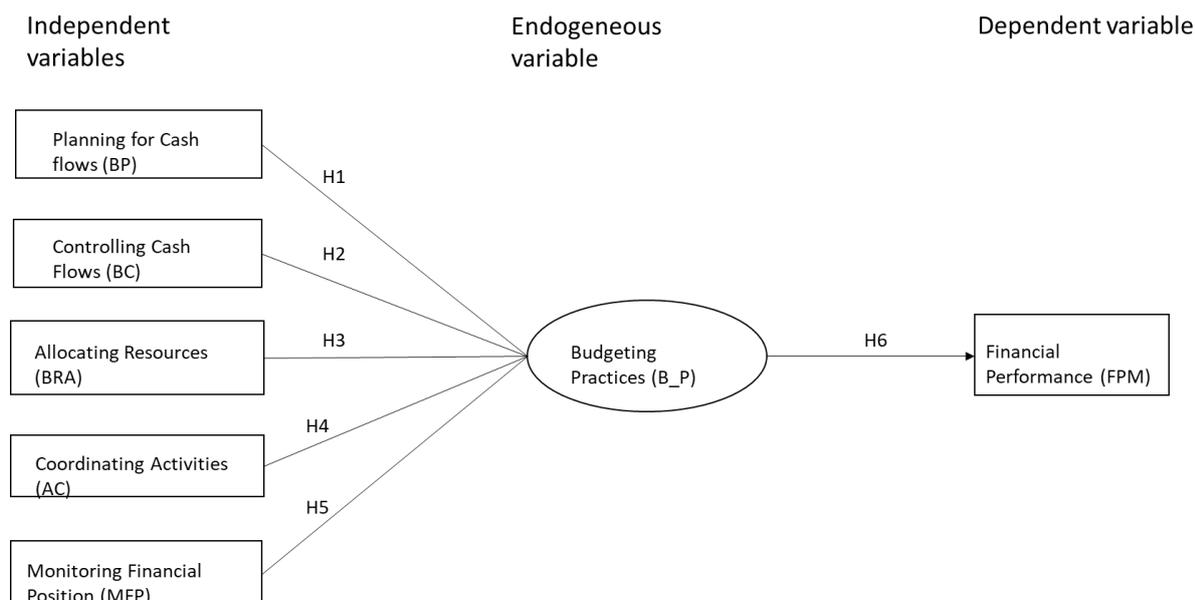


Figure 1: Conceptual Model
(Researcher 2021)

4. METHODOLOGY

4.1 Research Design

Sekaran & Bougie (2016) state that research philosophy is a belief about the way in which data on a phenomenon should be gathered, analyzed and used. This paper adopted a positivist research philosophy since its data was quantitative. A research design is an arrangement of how data will be effectively and efficiently collected and analyzed and in a manner that is relevant to address the research questions (Kothari, 2014). The study adopted a descriptive research design using a cross-sectional survey.

4.2 Data collection

The minimum sample was considered using an online calculator for structural equation modelling by Soper (2021). A self-administered survey questionnaire was given to a representative sample of 254 manufacturing small and medium enterprises (SME), that yielded 156 usable responses. A disproportionate stratified random sampling procedure was employed.

4.3 Measures

The measures of this research were adapted from prior studies with modifications to fit the specific context of the manufacturing SME environments. Measurements for independent variables, Planning for Cash flows (BP), Controlling Cash flows (BC), Allocating Resources (BRA), Coordinating Activities (AC), Monitoring Financial Position (MFP and the dependent variable Financial Performance (FPM) were phrased on a five-point Likert scale, from 1 = strongly disagree to 5 = strongly agree.

4.4 Data Analysis

In the analysis of the data, both psychometric properties and model testing were assessed through Structural Equation Modelling (SEM) using R-Statistics software and to test the study hypotheses. R statistics is one of the most widely used structural equation modelling (SEM)

techniques. Chin, (1998), posits that if SEM is precisely applied, it can surpass such first-generation techniques as principal components analysis, factor analysis, discriminant analysis, or multiple regression. This is because it provides superior flexibility in estimating associations among many predictors and criterion variables and permits modelling with unobservable latent variables. Further, it makes assessments of the model uncontaminated with measurement errors (Lee, Cheung, & Chen, 2005).

4.5 Reliability, Validity, and Fit Indices

4.5.1 Reliability

Generally, reliability is the degree of how reliable is the study measurement model in measuring the envisioned underlying constructs (Munir, 2018). The reliability of the measurement model is assessed based on the criteria detailed in Table 1. Prior research has revealed that there are three benchmarks for the assessment of reliability for a measurement model:

Table 1. Reliability Measures

Reliability	Criteria
Internal reliability	Internal reliability is achieved when the Cronbach's Alpha value is 0.6 or higher (Ahmad et al., 2016)
Composite reliability/ Construct reliability	The measure of reliability and internal consistency of the measured variables representing a latent construct. To achieve the construct reliability also known as composite reliability , a value of CR \geq 0.6 is required (Ahmad et al., 2016).
Average variance Extracted	Average Variance Extracted (AVE) is the average percentage of variation explained by the items in a construct. An AVE \geq 0.5 is required (Ahmad et al., 2016).

The formula to calculate the value of Construct Reliability (CR) and Average Variance Extracted (AVE) are shown in Table 2 below.

Table 2. The formula for CR and AVE

	Formula	Notes
CR	$(\sum \kappa)^2 / [(\sum \kappa)^2 + (\sum 1 - \kappa^2)]$	K = factor loading of every item n = number of items in a model
AVE	$\sum \kappa^2 / n$	

4.5.2 Validity

Validity is the ability of an instrument to measure what is supposed to be measured for a construct (Zainudin Awang, 2015). The validity of the measurement model is assessed based on the requirements stated in Table 3. There are three types of validity required for each measurement model:

Table 3. Validity Measures

Validity	Requirements
Convergent validity	The convergent validity is achieved when all items in a measurement model are statistically significant. This validity could also be verified through Average Variance Extracted (AVE). The value of AVE should be greater or equal to 0.5 to achieve this validity
Construct validity	The construct validity is achieved when the Fitness Indexes achieve the level of acceptance.
Discriminant validity	The discriminant validity is achieved when the measurement model is free from redundant items. Another requirement for discriminant validity is that correlation between each pair of the latent exogenous construct should be less than 0.85. Other than that, the square root of AVE for the construct should be higher than the correlation between the respective constructs (Zainudin Awang, 2015)

4.5.3 Fit Indices

The data was analyzed by Structural Equation Modelling (SEM) using AMOS 23.0 software. SEM is a multivariate technique, which estimates a series of inter-related dependence relationships simultaneously. The hypothesized model can be tested statistically in simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data (Ahmad et al., 2016). There are several Fitness Indices in SEM that reflect how fit the model is to the data. The use of at least one fitness index from each category of model fit is recommended (Awang, 2015). The information concerning the model fit category, their level of acceptance, and literature are presented in Table 4.

Table 4. Fitness indices Measures

Name of category	Name of index	Index name	Level of acceptance	of Literature
Absolute Fit	Chisq	Discrepancy chi square	$p \leq 0.05$	(Wheaton, 1987)
	RMSEA	Root Mean Square Error Approximation	≤ 0.08	(Browne & Cudeck, 1992)
	GFI	The goodness of Fit Index	≥ 0.90	(Jöreskog, Olsson, & Y. Wallentin, 2016)
Incremental Fit	AGFI	Adjusted Goodness of Fit	≤ 0.90	(Tanaka & Huba, 1985)
	CFI	Comparative Fit Index	≥ 0.90	(Bentler & Hu, 1998)
	TLI	Tucker-Lewis Index	≥ 0.90	(Bentler & Hu, 1998)
	NFI	Normed Fit Index	≥ 0.90	(Bollen, 1989)
Parsimonious Fit	Chisq/df	Chi Square/Degree of freedom	≤ 5.0	(Marsh & Hocevar, 1985)

5. RESULTS: PATH ANALYSIS

5.1 Descriptive Analysis for Budgeting Practices

The respondents comprised of 63% Males and 4% females. The age distribution was as follows: 22-29 years-22.4%, 30-39 years 53.2%, 40 -49 years- 19.2%, and 50 years and above- 5.2%. Their respondents' position and education in the firm is indicated in Table 5.

Table 5: Position and Education Status of Respondents

Variable	Labels	Frequency	Percent
Position	Owner	4	2.6
	Partner	6	3.8
	Manager	76	48.7
	Accountant	70	44.9
Education	High School	11	7.1
	Bachelor's Degree	85	54.5
	Diploma	29	18.6
	Masters/Doctorate	30	19.2

Source: Researcher (2020)

The respondents who were managers in 12 manufacturing sectors are shown in Figure 2.

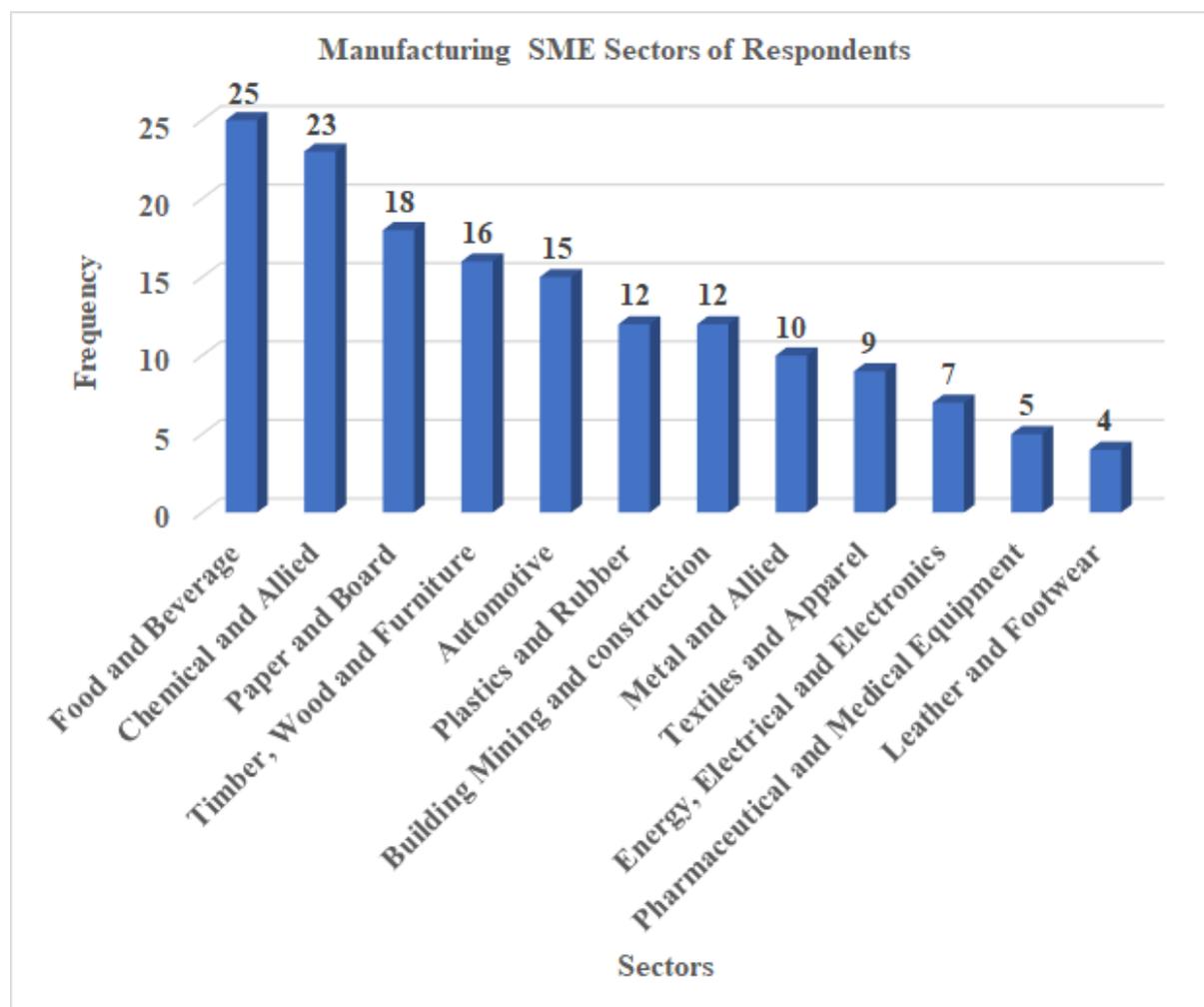


Figure 2: Manufacturing SME Sector Distribution among Respondents

The study sought to establish the use of budgeting practices and their influence on the financial performance of SMEs. This was done by comparing the means of the variables describing the budgeting practices dimensions. The respondents were asked to respond to items testing their level of agreement with statements on a scale of 1 to 5 where 1 represented strongly disagree and 5 represented strongly agree. The data were analysed using descriptive statistics of mean and standard deviation. The standard deviation indicated the consensus of the respondents. Variables with a mean of 4.0 or higher represented "strongly agree." A mean score close to 3.0 represented "Neutral," and a mean of 2.0 and below represented disagree and strongly disagree. Table 6 shows findings of descriptive analysis for budgeting practices.

Table 6: Descriptive Statistics Scores for Budgeting practices

	N	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
BP	240	2	5	4.46	0.041	0.633	0.401
BC	240	1	5	4.23	0.05	0.776	0.602
BRA	240	2.25	5	4.37	0.035	0.541	0.292
AC	240	1	5	4.08	0.046	0.715	0.512
MFP	240	1.67	5	4.42	0.039	0.599	0.359
FPM	240	1	5	3.76	0.061	0.951	0.905

Source: Researcher (2020)

Table 6 shows that all the variables mean scores of higher than 3 with budget planning having the highest mean score of 4.46 out of the possible 5. The lowest mean score was Financial Performances, with a mean score of 3.76 out of a possible 5. This shows that a majority of the respondents strongly agreed that budget planning was the top practice in the manufacturing SMEs but activity coordination was the lowest. The standard deviation for budget planning was SD=0.633, meaning that the data for budget planning was mostly concentrated around the mean. Controlling Cash flows had the highest standard deviation of 0.776.

5.2 Validity and Reliability

5.2.1 Reliability for Budgeting Practices

Table 7 shows that the model using the constructs of BP-Budget Planning, BC-Controlling Cash flows, BRA-Budget Resource Allocation, AC-Coordinating Activities, MFP-Monitoring Financial Position, and the dependent variable, FPM-Financial performance all met the reliability criteria. All were above the cut-off rate of 0.7 as suggested by Sekaran and Bougie (2016) and Hair et al. (2014).

Table 7: Budgeting Practices Reliability Results

Constructs for Budgeting Practices	Code	Loadings	SMC	Cronbach's Alpha	CR	AVE
Planning for Cash flows (BP)	BP2	0.752	0.566	0.676	0.757	0.735
	BP3	0.808	0.653			
Controlling Cash flows (BC)	BC2	0.744	0.554	0.840	0.676	0.641
	BC3	0.684	0.468			
Resources Allocation (BRA)	BRA1	0.728	0.530	0.810	0.832	0.683
	BRA2	0.731	0.534			
	BRA3	0.757	0.573			
	BRA4	0.757	0.573			
Activity Coordination (AC)	AC2	0.515	0.265	0.823	0.628	0.475
	AC3	0.703	0.494			
	AC4	0.576	0.332			
Monitoring Financial Position (MFP)	MFP2	0.779	0.607	0.844	0.846	0.730
	MFP3	0.797	0.635			
	MFP4	0.754	0.569			
Firm Performance (FRM)	FPM1	0.865	0.748	0.880	0.903	0.853
	FPM2	0.886	0.785			
	FPM3	0.859	0.738			

Source: Researcher (2020)

5.2.2 Validity for Budgeting Practices

Validity in this study was measured by examining construct validity (Markus, 2012) and using Average Variance Extracted (AVE). Table 8 shows that the validity of the model for budgeting practices using the three constructs of BP, BC, BRA, AC and MFP as well as the dependent variable, FPM all met the validity criteria for budgeting practices as in each case the AVE value is greater than 0.5 except for BP and AC and SQRT (AVE) is greater than all the correlation in that row or column (Hair et al., 2014).

Table 8: Discriminant Validity Results for Budgeting Practices

Variable	AVE	SQRT(AVE)	BP	BC	BRA	AC	MFP	FPM
BP	0.482	0.694	1					
BC	0.634	0.796	.326**	1				
BRA	0.610	0.781	.432**	.471**	1			
AC	0.493	0.702	.430**	.648**	.553**	1		
MFP	0.686	0.828	.270**	.573**	.430**	.582**	1	
FPM	0.795	0.891	s.235**	.255**	.344**	.355**	.296**	1

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

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

Source: Researcher (2020)

5.3 Diagnostic testing

5.3.1 Exploratory Factor Analysis for Budgeting practices

Budgeting practices were hypothesized as a second-order latent construct identified by the five first-order latent variables: budget planning, budget control, resource allocation, activity coordination, and financial position monitoring. Factor analysis was carried out in order to reduce the measurement items for budget practices and develop appropriate measures for Kaiser-Meyer-Olkin (KMO) and Bartlett test of sphericity as well as total variance explained by the components. Table 9 indicates that KMO measure of sampling adequacy resulted in 0.8, which is greater than 0.5 as recommended. This suggested that the data was suitable for factor analysis with a data set of the number of observations and the variables. The Bartlett's test of sphericity was significant ($\chi^2 (7, N=156) = 52.608, p < 0.00$), also suggesting that correlation patterns are close and that factor analysis would yield reliable factors.

Table 9: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity for Budgeting Practices.

Kaiser-Meyer-Olkin measure of Sampling Adequacy		0.8
Bartlett's Test of Sphericity	Approx. Chi-Square	52.608
	Df	7
	Sig.	0.000

Source: Researcher (2020)

5.3.2 Total Variance Explained for Budgeting practices

To determine the number of factors that represent the interrelations among the budgeting practices measuring constructs, this study employed variance percentage (Hair et al., 2014). Based on the five factors (Planning for Cash flows, Controlling Cash flows, Resources Allocation, Coordinating Activities, and Monitoring Financial Position) were computed and each had a loading (eigenvalues) greater than 1. These six factors explained 68.286 percent of the total variance in the variations of budgeting practices, as indicated in Table 10.

Table 10: Total Variance Explained for Budgeting Practices

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.777	33.981	33.981	5.777	33.981	33.981	2.688	15.812	15.812
2	1.917	11.274	45.254	1.917	11.274	45.254	2.634	15.492	31.304
3	1.646	9.681	54.935	1.646	9.681	54.935	2.339	13.757	45.061
4	1.236	7.268	62.203	1.236	7.268	62.203	2.301	13.533	58.594
5	1.034	6.083	68.286	1.034	6.083	68.286	1.648	9.692	68.286
6	.936	5.506	73.792						
7	.862	5.073	78.864						
8	.629	3.700	82.564						
9	.532	3.131	85.696						
10	.504	2.963	88.658						
11	.469	2.758	91.416						
12	.335	1.972	93.388						
13	.281	1.656	95.044						
14	.260	1.532	96.576						
15	.225	1.325	97.901						
16	.196	1.153	99.053						
17	.161	.947	100.000						

Extraction Method: Principal Component Analysis.

Source: Researcher (2020)

5.3.3 Pattern Matrix Coefficients

Budgeting practices in this study consisted of five components which included budget planning, budget control, resource allocation, activity coordination, and monitoring financial position. However, factor analysis results eliminated some latent variables in budget control, resource allocation, and monitoring financial position. The following measuring items did not load, BP1, BP4, BC1, BC4, AC1, and MFP1. Consequently, these were dropped from further analysis. The study evaluated goodness of fit using both absolute and incremental fit indices. The validity check of this measurement model indicated there was a satisfactory level of model fit. In this study, the pattern matrix coefficients for budget practices after factor analysis ranged from 0.515 to 0.886, thus showing that the variables were well related to a factor pattern, as indicated in Table 11.

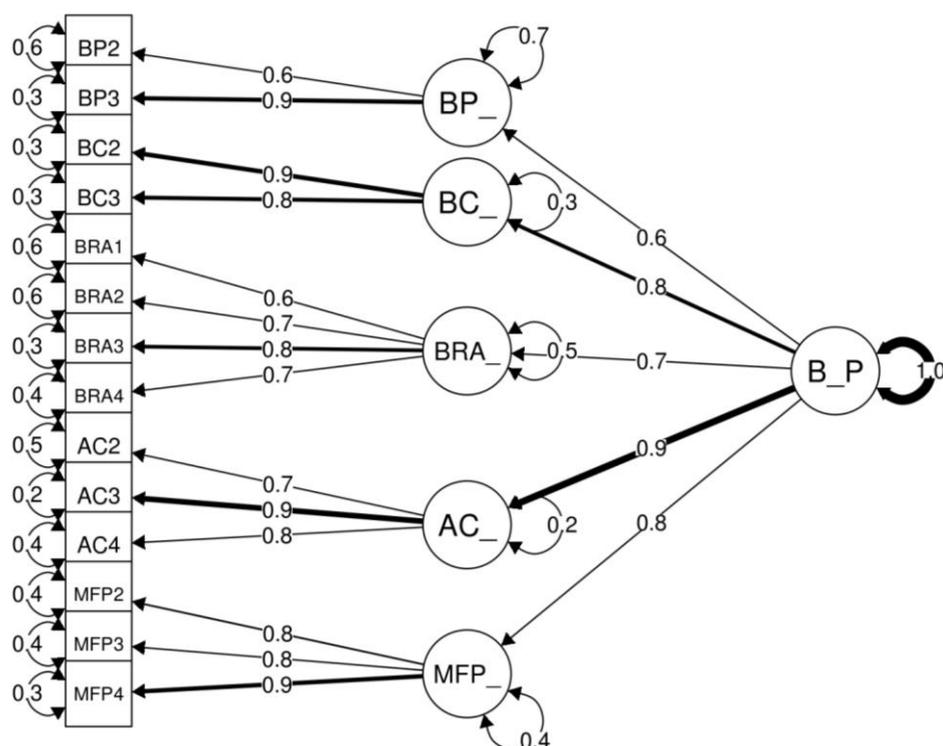
Table 11: Pattern Matrix for Budgeting Practices

Rotated Component Matrix				
Items	Component			
	1	2	3	4
BP2				0.752
BP3				0.808
BC2	0.744			
BC3	0.684			
BRA1		0.728		
BRA2		0.731		
BRA3		0.757		
BRA4		0.757		
AC2	0.515			
AC3	0.703			
AC4	0.576			
MFP2	0.779			
MFP3	0.797			
MFP4	0.754			
FPM1			0.865	
FPM2			0.886	
FPM3			0.859	

Source: Researcher (2020)

5.4 Measurement Model

Confirmatory factor analysis (CFA) was conducted to assess the extent to which the data fit the pre-specified theoretically-driven model. CFA is usually employed to confirm a priori hypothesis about the relationship between a set of measurement items and their respective factors. The CFA results for budgeting practices construct show that the Chi-square value was 160.104 with 72 degrees of freedom. The p-value associated with this result was significant at $p=0.000$. In addition to the χ^2 result, the value for CFI, an incremental fit index, was 0.947, which is above the 0.90 thresholds (Hair et al., 2014) hence acceptable. The values for absolute fit indices were 0.918 for goodness-of-fit (GFI), which is above the required 0.90 thresholds and therefore acceptable (Hair et al., 2014) and 0.071 for RMSEA. These results suggest that the measurement model for budgeting practices provided a reasonably good fit.



Chi-square (χ^2) = 160.104, DF = 72, P-VALUE = 0.000, CMIN/DF (χ^2 /df =2.224, RMSEA = 0.071, IFI= 0.947, CFI= 0.946, NFI= 0.907, GFI =0.912, AGFI=0.834

Figure 3: Model Fit for Budgeting Practices after Confirmatory Factor Analysis

Figure 3 indicates that the factor loading estimates were significant and ideal (above 0.30 at $p=0.00$). An examination of inter-correlations between the three dimensions of budgeting practices showed all estimates to be ranging from 0.6 to 0.9, implying discriminant validity. There were no cross-loadings among the measured variables. These results supported the measurement model validity, and hypothesis one was confirmed, which stated that budgeting practices as a second-order latent construct composed of budget planning, budget control, budget resource allocation, activity coordination and monitoring financial position.

Table 12: R- Square Values for Budgeting Practice as Dependent Variable

Variable	R-square	Variable	R-square
BP2	0.360	AC4	0.570
BP3	0.727	MFP2	0.620
BC2	0.736	MFP3	0.593
BC3	0.713	MFP4	0.729
BRA1	0.398	BP_M	0.339
BRA2	0.441	BC_M	0.706
BRA3	0.703	BRA_M	0.496

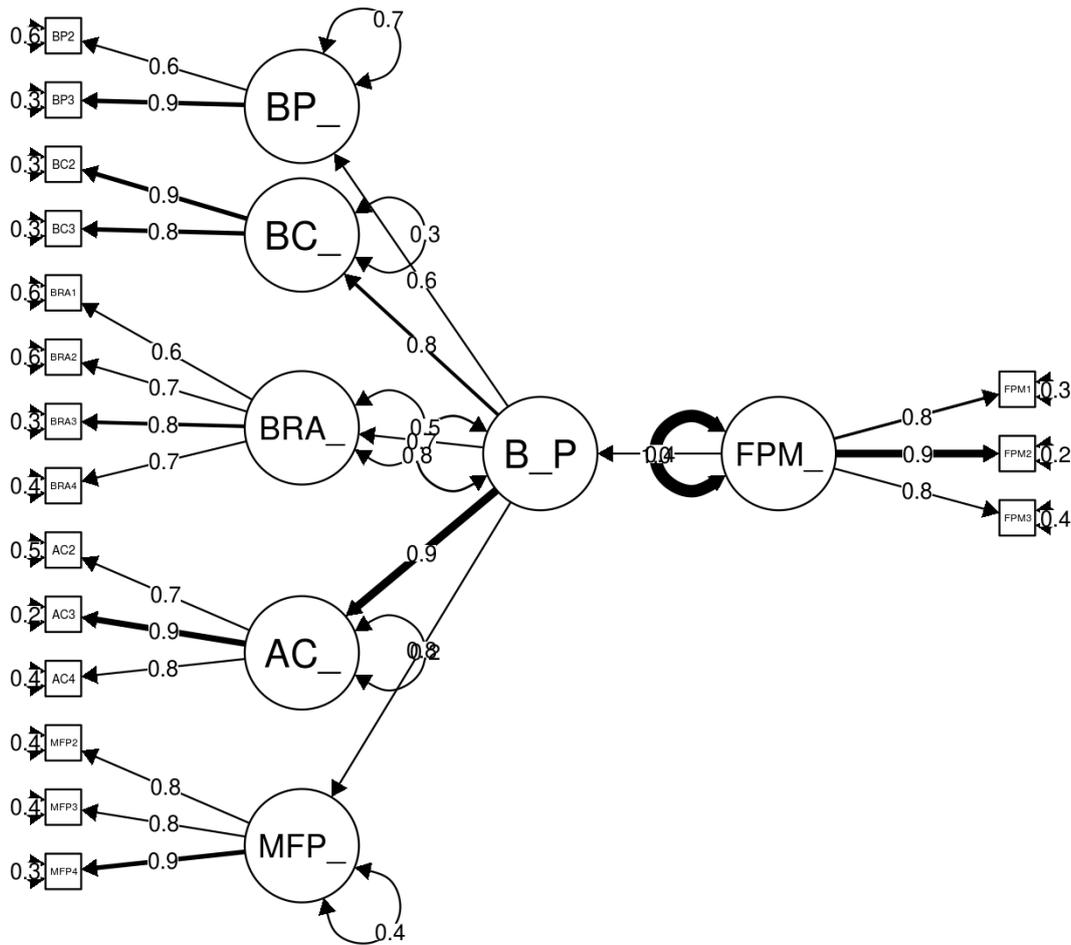
BRA4	0.557	AC_M	0.845
AC2	0.516	MFP_M	0.595
AC3	0.785	B_P	0.596

Source: Researcher (2020)

5.5 Structural Equation Model

SEM was employed to explain the relationships among the multiple variables for budgeting practices and financial performance. The structural model in SEM describes the associations among the latent constructs (Kline, 2012). It spells out how certain constructs directly or indirectly influence the values of other constructs in the model (Bryne, 2013) and how those constructs are associated with each other and are used for hypotheses testing. Figure 4 shows the structural model for budgeting practices and financial performance.

Raykov et al., (1992) recommend that acceptable SEM models are typically associated with chi-square values that are low for a given number of degrees of freedom, with matching p values greater than the pre-set significance level, as well as with high descriptive goodness-of-fit indexes (GFI, or NFI, NNFI, or CFI--depending on the program used) and a low root-mean-square residual (when LISREL is used). Even though there is some vagueness as to which descriptive index of fit under which circumstances is more instructive with respect to model fit, no single descriptive index of fit appears to be better than the others and flawless in this regard (Raykov et al., 1992). Consequently, in this study, we used Chi-square (χ^2), CMIN/DF (χ^2 /df), RMSEA, IFI, CFI, NFI, GFI, and AGFI for Structural Equation Model for Influence of Budgeting Practices on Financial Performance of Manufacturing SME. The SEM represents the graphical outlay of its mathematical expression, where there is an interrelation of the dependent variables to their explanatory variables by a set of equations. The outputs, both graphical and textual, are presented and discussed as follows.



Chi-square (χ^2) = 231.701, DF = 113, P-VALUE = 0.000, CMIN/DF (x2 /df =2.051, RMSEA = 0.066, IFI= 0.944, CFI= 0.943, NFI= 0.896, GFI =0.897, AGFI=0.860

Figure 4: SEM Model for Budgeting Practices

Figure 4 shows that when Budgeting Practices increased by one SD, Financial performance improved by 0.714 SD. Squared multiple correlations (R^2) indicated that Budgeting Practices accounted for 0.714 variances in financial performance. There were seven unobserved and 17 observed variables. The model was recursive with a sample size of 156. The R-Squared values are shown in Table 13 for ease of readability and to avoid congesting Figure 4.

Table 13: R- Square Values for Financial Performance as Dependent Variable

Variable	R-square	Variable	R-square
BP2	0.361	MFP3	0.593
BP3	0.725	MFP4	0.731
BC2	0.727	FPM1	0.675
BC3	0.722	FPM2	0.832
BRA1	0.402	FPM3	0.636
BRA2	0.441	BP	0.346
BRA3	0.699	BC	0.691
BRA4	0.557	BRA	0.510
AC2	0.524	AC	0.846
AC3	0.780	MFP	0.596
AC4	0.568	B_P	0.188
MFP2	0.617	FPM	0.714

Table 14 gives the various measures of fit indices used for the influence of budgeting practices on financial performance. The fit indices signified a perfect model fit as seen on the path indices of the structural model: Chi-square (χ^2) = 231.701, DF = 113, P-VALUE = 0.000, CMIN/DF (x2 /df =2.051, RMSEA = 0.066, IFI= 0.944, CFI= 0.943, NFI= 0.896, GFI =0.897, AGFI=0.860. The p-value was 0.000, hence, the conclusion drawn was that, the model fitted the data perfectly well.

Table 14: Measures of fit of Influence of Budgeting Practices on Financial performance

Fit Measures Parameter	Fit Measures Indicators	Interpretation	This Model Results	Comment
Chi-square (χ^2)	<0.5 >0.5	Acceptable Acceptable fit	231.701	
CMIN/DF (x2 /df)	<1 1 – 3 >3	Over fit Good fit Over fit	2.050	Good Fit
RMSEA	0<= About 0.05<= About 0.08<= >0.1	Exact fit Close fit Reasonable fit Over fit	0.066	Reasonable
IFI	0 –1 Close to 1	Fit Very good fit	0.944	Very Good

	>1	Over fit		
CFI	0 – 1 Close to 1 >1	Fit Very good fit Over fit	0.943	Very Good
NFI	0 – 1 Close to 1 >1	Fit Very good fit Over fit	0.896	Very Good
GFI	0 – 1 Close to 1 >1	Fit Very good fit Over fit	0.897	Very Good
AGFI	0 – 1 1 >1	Very good fit Perfect fit Over fit	0.860	Very Good Fit

Source: Researcher (2020)

5.6 Hypothesis testing

The following section shows the direct research hypothesis testing that was conducted by analyzing the path significance of each relationship. Table 15 shows the Path Coefficients for Influence of Budgeting Practices on Financial performance. The structural equation model was taken into account. All the paths reflect literature findings, and Figure 4 above shows the graphical outlay of SEM. For objective one, which was to determine the influence of budgeting practices on the financial performance of manufacturing SMEs in Nairobi County, Kenya. The null hypothesis was stated as follows – H₀: budgeting practices have no influence on the financial performance of manufacturing SMEs in Nairobi County, Kenya.

Table 15: Path Coefficients for Influence of Budgeting Practices on Financial performance

LHS	PATH	RHS	ESTIMATE	STD ERROR	Z-SCORE	P-VALUE	CI-LOWER	CI-UPPER
FPM	→	B_P	0.434	0.062	7.050	0.000	0.313	0.555
B_P	→	BP	0.588	0.066	8.926	0.000	0.459	0.718
B_P	→	BC	0.831	0.036	23.290	0.000	0.761	0.901
B_P	→	BRA	0.714	0.045	15.799	0.000	0.625	0.803
B_P	→	AC	0.920	0.029	31.428	0.000	0.862	0.977
B_P	→	MFP	0.772	0.040	19.503	0.000	0.694	0.849

Source: Researcher (2020)

From the path analysis results displayed in Table 15, we draw the conclusions and output presented in Table 16. All the five constructs and associated hypotheses were proved by the findings of this study.

Table 16: Hypothesis Testing Conclusion

Hypothesis	p-value	Comment
H ₁ Budgeting practices significantly influences financial performance of manufacturing SMEs in Nairobi City County	0.000	Proved
H _{1a} Planning for Cash flows significantly influences budgeting practices of manufacturing SMEs in Nairobi City County	0.000	Proved
H _{1b} Controlling Cash flows significantly influences budgeting practices of manufacturing SMEs in Nairobi City County	0.000	Proved
H _{1c} Allocating Resources significantly influences budgeting practices of manufacturing SMEs in Nairobi City County	0.000	Proved
H _{1d} Coordinating Activities significantly influences budgeting practices of manufacturing SMEs in Nairobi City County	0.000	Proved
H _{1e} Monitoring Financial Position significantly influences budgeting practices of manufacturing SMEs in Nairobi City County	0.000	Proved

Source: Researcher (2020)

Consequently, from the results of Table 16, we reject the null hypothesis H₀ Budgeting practices have no influence on the financial performance of manufacturing SMEs in Nairobi County, Kenya. We accept the alternative hypothesis: H₁ Budgeting practices significantly influence the financial performance of manufacturing SMEs in Nairobi City County. Further, the structural equation model is as follows:

$$\begin{aligned}
 \text{Budgeting practices (B_P)} &= \text{Planning for Cash Flows (BP)} + \text{Budget Control (BC)} + \\
 &\text{Allocating Resources (BRA)} + \text{Activity Coordination (AC)} + \\
 &\text{Monitoring Financial Position (MFP)} + \text{Error term} \\
 &= 0.588\text{BP} + 0.831\text{AC} + 0.714\text{BRA} + 0.920\text{AC} + 0.772\text{MFP} + \\
 &\text{Error}
 \end{aligned}$$

$$\begin{aligned}
 \text{Financial Performance (FPM)} &= \text{Budgeting practices (B_P)} + \text{Error term} \\
 &= 0.434\text{B_P} + \text{Error}
 \end{aligned}$$

6. DISCUSSION

The alternative hypothesis six in this paper tested the relationship between Budgeting Practices (B_P) and Financial Performance. These study findings confirm that there has been a significant increase in the use of budgeting practices (BP) by the manufacturing SMEs in Nairobi County, Kenya. The study found out that planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC), and Monitoring Financial Position (MFP) have all been implemented to a great extent largely as part of Budgeting practices. This designates that the Nairobi County Manufacturing SME firms in Kenya have deployed these five budgeting practices.

The null hypothesis for this paper states that, “There is no significant relationship between budgeting practices and manufacturing SMEs financial performance”. Since the structural equation modelling values for the path analysis on Budgeting practices (B_P) and Financial Performance (FPM) are $\beta=0.434$, $p=0.000$ which is less than the threshold value at 0.001 level of significance, the null hypothesis is rejected. We therefore accept the hypothesis that “There is a significant positive relationship between budgeting practices and manufacturing SMEs financial performance”

The study concluded that Budgeting practices have a strong (R-squared value=0.714) influence on the financial performance of manufacturing SMEs in Nairobi City County. The findings of the study agree with the findings of several preceding studies globally, regionally, and locally. King, Clarkson, and Wallace (2010) conducted research to determine the relationship between budgeting practices and firm performance in small healthcare businesses in Australia, where the results support the proclamation that the performance of a firm is linked to its choice of budgeting practices. Armitage, Webb, and Glynn (2016) investigated the use of MA techniques by Canadian SMEs. Among the methods investigated were budget reporting and analysis for decision-making. The results of the study found most SMEs studied often used operational budgets such as master budgets, quarterly and rolling budgets at highly sophisticated levels. In addition, the study found that smaller companies focused more on the cash component of their operational budgets and that as the SME size increased, the complexity of its operational budget also increased. Mulani et al., (2015) examined the effects of the budgetary process on the performance of SMEs in India and found out that the performance of SMEs in India is affected by the characteristics of the budget goals. A study carried out in Sri Lanka researched on the budgetary process and organizational performance of apparel industry (Silva & Jayamaha, 2012). The study concluded that efficient apparel companies should sustain sound budgetary processes for increased levels of organizational performance. The findings suggested that companies in the industry intending to increase their financial performance should improve their budgetary processes. Abdullah et al., (2015) examined the role of budgetary control on the performance of Tahir Guest House, Kano State in Nigeria. They found out those budgetary factors such as target budget setting, budget administration, and budget process played a significant role in influencing the firm's performance.

Locally, Isaboke and Kwasira, (2016) conducted a study to determine the influence of budgeting process on the financial performance of the County Government of Nakuru and established that the budgeting process strongly influenced the county government's financial performance. Kimunguyi et al., (2015) evaluated the way budgetary process affected the financial performance of NGOs in health sector in Kenya and found out that budgetary management practices had a positive effect on the NGOs' financial performance in Kenya.

7. CONCLUSIONS AND RECOMMENDATIONS

This study has highlighted the importance of the budgeting practices measured by four constructs, namely Planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC), and Monitoring Financial Position (MFP) and their influence on the financial performance of manufacturing SMEs. Since the said influence is positive and significant, it implies that there is a great need for manufacturing SMEs to

deploy budget accounting practices. To make this feasible and achievable, policy implementers, sector players, the government of Kenya, accounting bodies, and financial institutions should develop proper policies and regulations. The adoption of the budgeting practices will enable manufacturing SMEs to improve their financial performance and hence effectively contribute to the national economy in both wealth and job creation in Kenya. The study concluded that the measures of budgeting practices, namely Planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC), and Monitoring Financial Position (MFP) explained 59.6 % of the variations in budgeting practices in manufacturing SMEs. Moreover, overall budgeting practices explained 71.4% of the financial performance of SMEs.

This research established that budgeting practices are used in the manufacturing of small and medium enterprises in Nairobi City County, Kenya. It also revealed that the firms indicated the existence of established budgeting practices. This is an indicator that the firm's Planning for Cash flows (BP), Controlling Cash flows (BC), Resources Allocation (BRA), Activity Coordination (AC), and Monitoring Financial Position (MFP) are well-established practices. Moreover, they influence financial performance. Therefore, manufacturing SME management is guided to pay more focus to the budgeting practices since it improves their firm performance.

REFERENCES

- Abba, M., Yahaya, L., & Suleiman, N. (2018). Explored and Critique of Contingency Theory for Management Accounting Research. *Journal of Accounting and Financial Management*, 4(5), 40–50.
- Abbadi, S. S. (2013). Contingencies influencing the budgeting practices in the Jordanian financial sector. *World Applied Sciences Journal*, 22(7), 991–1000.
<https://doi.org/10.5829/idosi.wasj.2013.22.07.2966>
- Abdullah, S. R., Abubakar, M. A., Kuwata, G., & Muhammad, T. A. (2015). The Role of Budget and Budgetary Control on Organisational Performance: A Case Study of Tahir Guest House, Kano State, Nigeria. *International Journal of Innovative Research in Information Security*, 4(2), 22–28.
- Adu-Gyamfi, J., Yusheng, K., & Chipwere, W. (2020). The Impact of Management Accounting Practices on the Performance of Manufacturing Firms; An Empirical Evidence from Ghana. *Research Journal of Finance and Accounting*, (October).
<https://doi.org/10.7176/rjfa/11-17-13>
- Agbenyo, W., Danquah, F. O., & Shuangshuang, W. (2018). Budgeting and Its Effect on the Financial Performance of Listed Manufacturing Firms : Evidence from Manufacturing Firms Listed on Ghana Stock Exchange. *Research Journal of Finance and Accounting*, 9(8), 12–22.
- Ahmad, K. (2012). *The Use of Management Accounting Practices in Malaysian SMES*. University of Exeter.
- Ahmad, K. (2017). The Implementation of Management Accounting Practices and its Relationship with Performance in Small and Medium Enterprises. *International Review of Management and Marketing*, 7(1), 342–353.
- Ahmad, S., Zulkurnain, N., & Khairushalimi, F. (2016). Assessing the Validity and Reliability of a Measurement Model in Structural Equation Modeling (SEM). *British Journal of Mathematics & Computer Science*, 15(3), 1–8.
<https://doi.org/10.9734/bjmcs/2016/25183>

- Ajibolade, S. O. (2013). Management accounting systems design and company performance in Nigerian manufacturing companies : A contingency theory perspective. *British Journal of Arts and Social Sciences*, 14(Noll), 228–244.
- Anggadwita, G., & Mustafid, Q. Y. (2014). Identification of Factors Influencing the Performance of Small Medium Enterprises (SMEs). *Procedia - Social and Behavioral Sciences*, 115, 415–423. <https://doi.org/10.1016/j.sbspro.2014.02.448>
- Atsmon, Y., Hall, S., Kehoe, C., Birshan, M., Engel, M., Sibony, O., ... Musters, R. (2016). Resource allocation: Selected articles from the Strategy and Corporate Finance Practice. *McKinsey Special Collection*.
- Awang, Z. (2015). *SEM made simple: a gentle approach to learning Structural Equation Modelling*. Bandar Baru Bangi: MPWS Rich Publication.
- Awang, Zainudin. (2015). *SEM made simple: A gentle approach to learning structural equation modeling*.
- Bentler, P. M., & Hu, L. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424–453.
- Bollen, K. A. (1989). A New Incremental Fit Index for General Structural Equation Models. *Sociological Methods & Research*, 17(3), 303–316. <https://doi.org/10.1177/0049124189017003004>
- Browne, M. W., & Cudeck, R. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Bryne, B. M. (2013). *Structural Equation Modelling with Amos: Basic concepts, applications and programming*. Routledge.
- Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly: Management Information Systems*, 22(1).
- Dalberg. (2011). *Report on Support to SMEs in Developing Countries Through Financial Intermediaries*. Copenhagen.
- Dobák, M., & Antal, Z. (2010). Vezetés és szervezés: Szervezetek kialakítása és működtetése.[Management and organization: creating and operating organizations]. In *Aula Kiadó*, Budapest.
- Douglas, J., Douglas, A., Muturi, D., & Ochieng, J. (2017). *An Exploratory Study of Critical Success Factors for SMEs in Kenya An Exploratory Study of Critical Success Factors for SMEs in Kenya*. (September).
- Gichaaga, P. M. (2014). *Effects of Management Accounting Practices on Financial Performance of Manufacturing Companies in Kenya*. University of Nairobi, Nairobi.
- Green, A., Ali, B., Naeem, A., & Ross, D. (2000). Resource allocation and budgetary mechanisms for decentralized health systems: Experiences from Balochistan, Pakistan. *Bulletin of the World Health Organization*, 78(8), 1024–1035. <https://doi.org/10.1590/S0042-96862000000800012>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (7th ed.). Edinburgh, Harlow, Essex: Pearson Education Limited.
- Hara, Y. (2020). *Inter-Firm Relationship Management : Activity Coordination , Resource Configuration , Trust Building , and Network Orchestration*.
- Hussain, J., Shah, F. A., & Akhtar, S. (2016). Market Orientation and Organizational Performance in Small and Medium Sized Enterprises . a Conceptual Approach. *City University Research Journal*, 06(01), 166–180.
- Isaboke, E. M., & Kwasira, J. (2016). Assessment of budgeting process on financial performance of county government of Nakura, Kenya. *International Journal of Economics, Commerce and Management*, IV(5), 134–150.
- Jöreskog, K. G., Olsson, U. H., & Y. Wallentin, F. (2016). *Multivariate Analysis with*

- LISREL. In *Iranian Studies*. <https://doi.org/10.1007/978-3-319-33153-9>
- Kamunge. (2016). Expertise to handle budget procedures and control. *Research Journal of Finance and Accounting*, 6(14), 135–153.
- Kang'aru, P. N., & Tirimba, I. (2018). Effect of Financial Planning Practices on the Financial Performance of Non Profit Making Health Organizations in Kiambu County, Kenya. *International Journal of Scientific and Research Publications (IJSRP)*, 8(5), 599–623. <https://doi.org/10.29322/ijsrp.8.5.2018.p7778>
- Kariyawasam, H. N. (2018). a Study of Cost and Management Accounting Practices in Sri Lanka'S Manufacturing Industry. *International Journal of Recent Advances in Multidisciplinary Research*, 5(3), 3632–3634.
- Kibunja, E. W. (2017). *Budgetary process and financial performance of Murang'a county government, Kenya*. Kenyatta University.
- Kihara, A. S. N. (2016). *Influence of Strategic Contingency Factors on Performance of Large Manufacturing Firms in Kenya*. Jomo Kenyatta University of Agriculture and Technology.
- Kimpimäki, H. (2014). *Enterprise Architecture in Practice: From IT Concept towards Enterprise Architecture Leadership* (Vol. 2014-Janua). Tampereen teknillinen yliopisto - Tampere University of Technology.
- Kimunguyi, S., Memba, F., & Njeru, A. (2015). Effect of budgetary process on financial performance of NGOs in heath sector in Kenya. *International Journal of Business and Social Science*, 6(12), 163–172.
- Klimaitienė, R., & Ramanauskaitė, J. (2019). Insight into budgeting practices: empirical study of the largest manufacturing companies in Lithuania. *Science and Studies of Accounting and Finance: Problems and Perspectives*, 13(1), 19–27. <https://doi.org/10.15544/ssaf.2019.03>
- Kline, R. B. (2012). Assumptions in structural equation modeling. In *In R. H. Hoyle (Ed.), Handbook of structural equation modeling* (pp. 111–125). The Guilford Press.
- Koech, G. M. (2015). *The Effect Of Budgetary Controls On Financial Performance Of Manufacturing Companies In Kenya*. University of Nairobi.
- Kothari, C. R. (2014). *Research Methodology Methods and Techniques* (2nd. Revis). New Delhi: New Age International Publishers.
- Lee, M. K. O., Cheung, C. M. K., & Chen, Z. (2005). Acceptance of Internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information and Management*, 42(8), 1095–1104. <https://doi.org/10.1016/j.im.2003.10.007>
- Lundberg, H., & Andresen, E. (2012). Cooperation among companies, universities and local government in a Swedish context. *Industrial Marketing Management*, 41(3), 429–437. <https://doi.org/10.1016/j.indmarman.2011.06.017>
- Malik, N. S. (2013). *Management Accounting: Nature and Scope*.
- Mandela, M. N. (2014). The effect of budgetary control process on firm financial performance: a case study of Nzoia Sugar Company, Kenya. <https://doi.org/10.4324/9781315853178>
- Marsh, H. W., & Hocevar, D. (1985). *<Application_of_confirmatory_factor_analysis_to_the_study_of_self-concept_First_and_higher_order_fac1.pdf>*. 97(3), 562–582.
- Mbuthia, V. W., & Omagwa, J. (2019). *Effect of Budgetary Control on Financial Performance of Selected Commercial Banks in Kenya*. 10(3), 34–42. <https://doi.org/10.9790/5933-1003053442>
- Munir, F. F. A. (2018). Reliability and Validity Analysis on the Relationship between Learning Space, Student's Satisfaction and Perceived Performance Using SMART-PLS. *International Journal of Academic Research in Business and Social Sciences*, 8(1),

- 775–786. <https://doi.org/10.6007/ijarbss/v8-i1/3847>
- Myint, Y. Y. (2019). *Budgetary Control System of Myanmar Private Commercial Banks : Case Study of Myanmar Oriental Bank Limited & Tun Foundation Bank*. 3(April), 1–7.
- Nair, S. (2020). *The Budgetary Process and its Effects on Financial Performance : A Study of Small and Medium-Sized Enterprises in Yemen*. (September).
- Okoye, E. I., & Akenbor, C. (2012). Strategic Management Accounting Practices in a Competitive Environment: A Theoretical Exposition. *SSRN Electronic Journal*, 4(2). <https://doi.org/10.2139/ssrn.2022169>
- Otley, D. (2016). *The contingency theory of management accounting and control : 1980 – 2014 David Otley The contingency theory of management accounting and control : 1980–2014*.
- Rabie, C., Cant, M. C., & Wiid, J. A. (2016). Training and development in SMEs: South Africa’s key to survival and success? *Journal of Applied Business Research*, 32(4), 1009–1024. <https://doi.org/10.19030/jabr.v32i4.9717>
- Raykov, T., Tomer, A., & Nesselroade, J. R. (1992). *Reporting structural equation modeling results in Psychology and Aging : Some proposed guidelines Reporting Structural Equation Modeling Results in Psychology and Aging : Some Proposed Guidelines*. (January). <https://doi.org/10.1037//0882-7974.6.4.499>
- Romenti, S., & Illia, L. (2013). Communicatively Constituted Reputation and Reputation Management. In C. E. Carroll (Ed.), *The handbook of communication and emotion* (pp. 183 – 196). Oxford: Blackwell.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business A Skill-Building Approach* (7th ed.). John Wiley & Sons Ltd.
- Sexton, R. J., Shogren, J. F., Cho, S., Koo, C., List, J., Park, C., ... 近能善範. (2018). Effect of budget and budgetary control on firms performance: a case study of the East African Portland Cement Company Limited. *USIU-Africa*.
- Siyanbola, T. T. (2013). The Impact Of Budgeting And Budgetary Control On The Performance Of Manufacturing Company In Nigeria. *Journal of Business Management & Social Sciences Research*, 2(12), 8–16.
- Soper, D. (2021). Calculator: a-priori sample size for structural equation models.
- Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management*, 5(3), 28–36.
- Tanaka, J. S., & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology*, 38(2), 197–201. <https://doi.org/10.1111/j.2044-8317.1985.tb00834.x>
- Taticchi, P., Tonelli, F., & Cagnazzo, L. (2010). Performance measurement and management: A literature review and a research agenda. *Measuring Business Excellence*, 14(1), 4–18. <https://doi.org/10.1108/13683041011027418>
- The World Bank Group. (2007). *Budgeting and Budgetary Institutions* (S. Anwar, Ed.). <https://doi.org/10.2139/ssrn.400120>
- Wheaton, B. (1987). Assessment of Fit in Overidentified Models with Latent Variables. *Sociological Methods & Research*, 16(1), 118–154. <https://doi.org/10.1177/0049124187016001005>
- Yang, Q. (2010). *The impact of the budgeting process on performance in small and medium-sized firms in China*. <https://doi.org/10.3990/1.9789036529839>
- Yoshino, N., & Taghizadeh-Hesary, F. (2016). Major Challenges Facing Small and Medium-sized Enterprises in Asia and Solutions for Mitigating Them. In *ADB Working Paper Series Major*. Tokyo.
- Zhu, Q., Sarkis, J., & Lai, K. H. (2012). Examining the effects of green supply chain

management practices and their mediations on performance improvements. In *International Journal of Production Research* (Vol. 50).

<https://doi.org/10.1080/00207543.2011.571937>

Zwikael, O., & Sadeh, A. (2007). Planning effort as an effective risk management tool.

Journal of Operations Management, 25(4), 755–767.

<https://doi.org/10.1016/j.jom.2006.12.001>