

Impact of Strategic Management Accounting Practices on Financial Performance of Nepalese Manufacturing Firms

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Abstract

This study was carried out to examine the relationship between financial performance and the application of management accounting practices in the Nepalese manufacturing firms. The study adopted the survey research design. The population of the study consists of all listed manufacturing companies under Nepal stock exchange. The study used simple random sampling. Four manufacturing firms were randomly selected for the study. Data for the study were obtained through the administration of a self-designed questionnaire to managers or accountants of the sampled firms through mail survey. Regression and t-test were used to test the hypotheses postulated for the study. The study showed that application of management accounting tools has a positive relationship with financial performance of companies' survey. The study also found a significant difference in effectiveness of decision making between application of management accounting tools and traditional management accounting techniques and concludes that implementation of strategic management accounting practice is necessary to enhance organizational performance of the firm. The study therefore recommends that manufacturing companies, especially the ones listed and still tradable under NEPSE, put in place appropriate measures to apply modern management accounting tools called strategic management accounting practices to ensure efficient and realistic decision-making process that will enhance financial performance.

Keywords: *Strategic management accounting, Managerial decision making, financial performance.*

Introduction

Conventional management accounting practices were geared towards providing information to aid managers in internal decision making in a firm and as such the focus of the management accounting systems has also tended to be internally orientated. In the late 1980s, scholars and academics particularly (Johnson & Kaplan, 1987; Bromwich & Bhimani, 1989) noticed that the traditional management accounting was not adjusting to changes in the modern business environment hence was fall short of its basic function as an aid to managers in formulating policies and decision making. It is to fulfill the need to enhance the quality of management accounting information for managers it was necessary to focus more widely on the external environment of the firm and thus the concept of strategic management accounting developed. Simmonds (1986) described Strategic Management Accounting as the collection of management accounting information about a business and its competitors for use in developing and monitoring the business strategy. SMA permits a firm to make more pertinent and precise information to efficiently design its competitive strategies for competitive advantage in the industry (Egbunike, Egolum & Agwaramgbo, 2015; Ojua, 2016). The SMA is a set of accounting tools that provide accurate and timely information to various aspects of an enterprise's decision-making needs, including strategic costing, target costing, competitors accounting, consumer accounting, strategic decision, planning, control and performance management, and evaluation (Alsoboa, Nawaiseh, Karaki & Khattab, 2015). SMA techniques, among others, are activity-based costing, attribute costing, brand value budgeting, benchmarking, competitive position monitoring, competitor cost assessment, environmental management accounting, life cycle costing, quality costing, strategic costing, target costing, kaizen costing, value chain costing, strategic pricing, and customer accounting (Cinquini & Tenucci, 2010; Ramljak & Rogosic, 2012; Egbunike, Egolum & Agwaramgbo, 2015).

Business innovations, advancement in technology and the changing demand of customers have brought more competition in business and marketing. The competitive nature of contemporary business atmosphere has forced corporate managers to cultivate business techniques and strategies that would guide an organization towards the maximization of profits. This business objective can be achieved through increased sales and reduced cost of production. The optimization of profits and minimization of costs may enable an organization to create a competitive advantage in its industry. Suffice to say that traditional management accounting practices may not be able to address such challenges. Strategic management accounting practices provide strategies that can influence a large number of customers to have a lasting preference for a company's products (Ramljak & Rogosic, 2012).

According to Thompson, Strickland and Gamble (2009), the adoption of strategic management accounting techniques may provide an organization with a sustainable competitive advantage over its rivals. Management accounting needs have evolved from mere reporting of historical information, especially on variance analysis, to taking part in the strategic planning process of an organization. Strategic management accounting has received global publicity in

recent times as a new view of awareness in the provision of financial and non-financial information for strategic initiatives and positioning. However, there is still lack of accounting literature and empirical studies in developing countries like Nepal on the effectiveness of Strategic management accounting practices on organizational performance. This research-based study seeks to fill this gap and will answer following are some research questions by examining the impact of strategic management accounting practices on financial performance of manufacturing companies with emphasis on companies listed in Nepal stock exchange. The search for strategic management accounting tools, especially in the manufacturing sector, should therefore be at the forefront for development of innovative competitive strategies that may enable modern organization to remain profitable and competitive. How much awareness do the Nepalese accountants and managers have about management accounting? To what extent are management accounting tools adopted in Nepalese manufacturing firms? What impact does strategic management accounting practices have in organizational performance of manufacturing companies? How does strategic management accounting practice affect management decision making in manufacturing firms in Nepal? These are some of the questions this study seeks to address.

The main objective of the study is to examine the effect of use of management accounting tools on financial performance of manufacturing companies. To achieve the research objectives, the study will subject the following hypotheses which are stated in the null form to empirical test:

H1: There is a positive impact of strategic management accounting practices on financial performance.

Literature Review

There is no generally accepted definition of Strategic Management Accounting. Accountants and researchers are yet to come to a consensus as regards the contents and scope of strategic management accounting hence there is no comprehensive framework available on strategic management accounting. Some attempts have been made to define management accounting. One of the earliest definitions was given by Simmonds (1986) who is viewed as the father of management accounting. Simmonds views strategic management accounting as the provision and analysis of management accounting data about a business and its competitors which is of use in the development and monitoring of the strategy of that business. Bromwich and Bhimani have given the following definition of strategic management accounting: “provision and analysis of financial information on the firm’s product markets and competitors’ costs and cost structures and the monitoring of the enterprise’s strategies and those of its competitors in these markets over a number of periods” Bromwich and Bhimani (1989)

Puolamaki (2014) described SMA as a process of using management accounting systems (explicit and quantitative information) to support strategic decision-making of a business in a competitive economy. Roslender and Hart (2015) review much of the literature and argued that

three different notions of strategic management accounting have emerged. Firstly, the attempt to integrate strategic ideas into management accounting by taking generic strategy tools and looking at what management accounting information can be used to support strategy. Secondly, that it is designed to align management accounting with marketing management for strategic positioning. This view looks at the marketing tools used by businesses and uses management accounting within those tools. Thirdly, that SMA is just a name to group together many of the modern methods in management accounting that have developed which have a strategic implication. There are a number of contemporary approaches to management accounting which have been marked as strategic management accounting techniques because of their external and market orientated content (Roslender & Hart, 2015). The practical application of these methods has also gained great success. Some SMA techniques are discussed below:

Activity Based Costing

Activity-based costing is a costing procedure that identifies activities in an organization and assigns the cost of each activity with resources to all products and services according to the actual consumption by each (Egbunike, Egbunike & Mofolusho, 2013). ABC's basic idea is: product consumption operation, the operating consumption costs, operating cost structure by product cost. The main purpose is to eliminate non-value-added role in raising value added operational efficiency and effectiveness. ABC method used to overcome the traditional cost accounting system of clear responsibilities under the indirect costs of defects, so that the indirect costs of the growing technology base sufficient attribution to a variety of products go up, which can greatly enhance the authenticity of cost information (Egbunike, Ijeoma & Ebubeogu, 2015).

Balance Score Card

The balanced scorecard (BSC) is a strategic planning and management system that organizations use to: Communicate what they are trying to accomplish. Align the day-to-day work that everyone is doing with strategy. Prioritize projects, products, and services. Measure and monitor progress towards strategic targets (Maisel, 2012). The system connects the dots between big picture strategy elements such as mission (our purpose), vision (what we aspire for), core values (what we believe in), strategic focus areas (themes, results and/or goals) and the more operational elements such as objectives (continuous improvement activities), measures (or key performance indicators, or KPIs, which track strategic performance), targets (our desired level of performance), and initiatives (projects that help you reach your targets (Kaplan & Norton, 2000)

Target Costing

Target costing is a strategic cost management is an important tool, it is based on customer demand, product planning and design stage, functional cost analysis, to continue to reduce costs, enhance competitiveness as a cost management approach. Target Costing to focus on effective implementation of corporate financial performance goals, develop a product cost-based approach and methodology (Jacomit, Granja, Picchi, 2018). Target costing inspection costs

from the market point of view, indicating the direction of cost-control efforts should be made in the design stage of new product development to lower the cost of the respective requirements (Zimina, Ballard, Pasquire, 2012; Hibbets, Albright & Funk, 2015).

Value Chain Analysis

Value chain analysis is a strategy tool used to analyze internal firm activities. Its goal is to recognize, which activities are the most valuable (i.e., are the source of cost or differentiation advantage) to the firm and which ones could be improved to provide competitive advantage. Value chain, value chain can be divided into horizontal and vertical value chain (Grant, 2010). Horizontal value chain refers to the enterprises from the original sources of raw materials suppliers to the final consumption of finished products between each link had to be unbundled to inspect the assets allocated to each job number and cost-effectiveness of state to determine for each activity cost driver in order to better understand the behavior of the cost and product advantages arising from the source. Analysis of the internal analysis of major labor productivity, mechanisms operating efficiency, inventory cost control and the stability of the workforce (Cevolini, 2016)

Quality Cost Analysis

Quality cost analysis in-time production system arises from the requirements of zero-defect products, is an enterprise quality using non-monetary indicators, comprehensive reflection and analysis of product research, development, design, manufacture, through to after-sales service companies throughout the cycle improve the quality and service with regard to the efforts and achievements. Quality of the product cost can be divided into prevention costs, appraisal costs, internal quality loss cost and external quality loss cost. Only in complete control of enterprise managers and quality-related cost information is correct only after the quality of cost estimates, to improve the quality of the performance evaluation methods (Knouse, 2016).

Product-cycle approach

The product life cycle describes the period of time over which an item is developed, brought to market and eventually removed from the market. The cycle is broken into four stages: introduction, growth, maturity and decline (Steeffens, 2012). The idea of the product life cycle is used in marketing to decide when it is appropriate to advertise, reduce prices, explore new markets or create new packaging. Product life-cycle management (PLM) is the succession of strategies by business management as a product goes through its life-cycle. The condition in which a product is sold (advertising, saturation) changes over time and must be managed as it moves through its succession of stages (Anderson & Zeithaml, 2014).

Organizational Performance

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). It is the objective of any organization because only through performance, are organizations able to grow and progress (Gavrea, Ilies & Stegorean, 2018). According to Richard et al. (2016) organizational

performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc. Organizational performance refers to how well an organization is doing to reach its vision, mission, and goals.

Method

Survey research design was used in this study. This research strategy was considered necessary because of its ability to view comprehensively and in detail the major questions raised in the study. The population consists of all manufacturing companies listed under NEPSE and presently tradable. 4 manufacturing companies were randomly selected from three major commercial and industrial cities in the state making a total of 15 manufacturing firms for the study. Data for the study were obtained through the administration of a self-designed questionnaire to managers or accountants of the sampled firms. The questionnaire was structured to elicit information about the adoption, use, strategies and method of strategic management accounting tools in the organization. The data were analyzed to bring out the descriptive and inferential statistics. The hypotheses formulated for this study were tested using the chi square and t-test analyses at 0.05% level of significance.

Results and Analysis

This section relates to the testing of hypotheses earlier stated in this study. For the sake of understanding, the hypotheses will be restated before presenting the result analyses.

H1: there is a positive impact of strategic management accounting practices on financial performance based on ROA and ROE.

Table 1: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson
					R Square Change	F Change	Sig. F Change	
1	0.458 ^a	.210	.159	1.23100	.051	.510	.020	2.00

a. Predictors: (Constant), PAS, BS, CONS, DM, CS

b. Dependent Variable: ROA

Table 2: Model II Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson
					R Square Change	F Change	Sig. F Change	
1	.911 ^a	.830	.805	11.92520	.018	.575	.042	1.023

a. Predictors: (Constant), PAS, BS, CONS, DM, CS

b. Dependent Variable: ROE

Table 2 and 3 shows that the co-efficient of determination or R^2 i.e., goodness of fit value lies between 0 to 1. R^2 is the measurement used to explain how much variability of one factor can be caused by its relationship to other related factors. The summarized regression results in table 01 show that the multiple regression model is weakly significant. Above table shows that value of R^2 is 0.210. This shows that the model is able to explain about 21 percent of the variations of the financial performance i.e., return on assets and remaining 79.10 % is explained by other factors. Durbin Watson statistic is 2.00 indicates no autocorrelation.

Table 3: Model I ANOVA

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	566.496	246.617	8.273	.042 ^b
	Residual	110.486	91.431		
	Total	676.982			
a. Dependent Variable: ROA					
b. Predictors: (Constant), PAS, BS, CONS, DM, CS					

Table 4: Model II ANOVA

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	603.960	182.360	7.557	.002 ^b
	Residual	73.022	42.210		
	Total	676.982			
a. Dependent Variable: ROE					
b. Predictors: (Constant), PAS, BS, CONS, DM, CS					

Table 5: Model coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	127.155	13.573		.334	.032		
	BS	.081	.268	.272	3.051	.041	.271	3.690
	CONS	.112	.255	.208	5.298	.036	.231	4.330
	DM	.081	.286	.071	4.899	.043	.311	3.110
	CS	.074	.340	.082	2.333	.042	.322	3.120
	PAS	.180	.268	.175	.342	.033	.332	3.012

a. Dependent Variable: ROA

Table 4 and 5 shows the Analysis of Variance (ANOVA) provides a statistic for testing the hypothesis that there is a weak positive relationship between ROA and ROE of manufacturing firms and the predictor variables (application of strategic management accounting practices i.e., PAS, BS, CONS, DM, CS). Correlation exists between the response and predictor variables if $P\text{-value} < 0.05$. As shown in table, $P\text{-Value} = 0.040 < 0.05$ indicated that there is enough

evidence to support the alternative hypotheses, that there is a linear relationship (weak) between organizational performance and use of SMA techniques or P-value is 0.042 indicates that model is significant at 5% level.

Table 6: Model II Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	2.432	6.532		0.321	.043		
	BS	.361	.335	0,372	3.111	.031	.776	1.288
	CONS	.182	.318	.172	5.332	.043	.856	1.168
	DM	.231	.357	.221	4.996	.031	.815	1.226
	CS	.152	.423	.163	1.522	.021	.774	1.291
	PAS	.053	.335	.043	2.432	.042	.951	1.051

a. Dependent Variable: ROE

From the above table 6 and 7 shows that budgeting system, controlling system, decision making, costing system and performance system has impact ROA by 8.10, 11.20, 8.10, 7.40, and 18.0% respectively. Similarly on ROE by 36.1, 18.2, 23.1, 15.2, and 5.3% respectively. Found that ROA has highly impact of performance appraisal system by 18%, followed by controlling system i.e., 11.20%, equal impact of budgeting system and decision-making system is found and least impact is found of costing system on ROA and ROE has Highly impact of Decision making by 36.1% followed by decision making i.e., 23.1% and least impact is found of Performance appraisal system in Nepalese manufacturing firms. These results suggest that there is a significant difference in the level of effectiveness in application of SMA and managerial decision making in manufacturing companies in Nepal.

Discussion

The study was undertaken to examine the effect of application of Strategic Management Accounting Practices on organizational performance in Nepal. Based on the data obtained from the survey results of the sampled firms, the study summarizes the findings as stated below:

- That implementation of strategic management accounting techniques still very low in Nepalese manufacturing firms.
- Based on the study hypothesis, the study finds empirical evidence to support the claim that there is a positive relationship between application of strategic management accounting tools and organizational performance.
- Findings of the study also reveal a significant statistical difference between effectiveness of strategic management accounting and conventional management accounting tools in decision making. The implication is that manufacturing companies that adopt and implement SMA make better informed economic and business decision due to the superiority of the SMA techniques.

This result is consistent to the result of Ojua (2016), Rechard et.al. (2016), Maisel (2012), and Knouse (2016), in which they concluded that strategic management accounting contributes to financial performance in high perceived environmental uncertainty situation, which involves highly competitive actions and market demand. Likewise, Cinquini (2010) concluded with empirical that there is an impact of strategic management accounting practices on the financial performance of the manufacturing firms.

Conclusion and Implication

This study was carried out to examine the relationship between organizational performance of the Nepalese manufacturing companies and the application of strategic management accounting mechanisms. The uniqueness of our analysis comes from its disaggregation of investigative variables into a number of alternatives based on data analysis from the survey carried out.

This study showed that application of strategic management accounting tools has a positive relationship with financial performance of company's survey. The study also found a significant difference in effectiveness of decision making between application of strategic management accounting tools and traditional management accounting techniques and concludes that implementation of strategic management accounting practice is necessary to enhance organizational performance of the firm. The study therefore recommends that manufacturing companies, especially the ones listed and tradable under Nepal stock exchange (NEPSE), put in place appropriate measures to apply Strategic management accounting tools to ensure efficient and realistic budgeting and decision-making process that will enhance financial performance.

Since globalization, liberalization, privatization, modernization and competition are the five pillars for strengthening the manufacturing sector; these concepts should be adhered to all the time in developing strategy for Nepalese manufacturing firms. These dimensions have opened Nepalese manufacturing sector towards a greater competition and application of strategic management accounting system towards formulating and implementing organizational strategy, to create a significant comprehensive financial performance.

With this research on the impact of strategic management accounting system on financial performance, this area is ripe for future researcher. As is common in survey research, data are cross-sectional and self-report. There are several significant issues to be considered for future research. In order to improve the future study, the sample size could be collected from the manufacturing firms listed and non-listed under NEPSE or established all over the country of Nepal not only focusing on financial performance but also may show impact on non-financial performance too. Therefore, the new findings of manufacturing sector can give a new direction in understanding the subject phenomenon. Further research might be carried out with more sample of manufacturing firms. In addition, a step further structural equation modelling approach of data analysis may be taken into account to moderating and mediating effect of strategic management accounting practices. Therefore, it would be very interesting to expand the survey to provide longitudinal survey of strategic management accounting changes documenting changes over time in the adoption of strategy and significant influence of the financial performance of the manufacturing firms.

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