

A Study of Management Accounting Practices and Financial Performance in Industrial Companies in Jordan

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Abstract: With advancement in technology and changing business environment, it is important to assess the effect of adoption of management accounting practices on the financial performance in companies. Hence, the purpose of the study was to assess the effect of Management Accounting Practices (MAPs) on the financial performance in industrial companies of Jordan. The study considered MAPs (costing practices, budgeting practices, decision-making practices, performance evaluation practices and strategic analysis) as the independent variables and financial performance (Return on Assets - ROA) as the dependent variable. Data collection was done through primary sources where 142 responses were collected using structured questionnaire. Multiple regression test was used to test the hypothesis which found that there is a statistically significant effect of adoption of management accounting practices on the financial performance in Jordanian industrial companies.

Keywords: Budgeting Practices, Costing Practices, Decision-Making Practices, Financial Performance, Management Accounting Practices, Performance Evaluation Practices, Return on Assets and Strategic Analysis.

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1. Introduction

Operations are analyzed by organizations based on management accounting techniques. The role of management accounting is increasing with respect to the changing business environment. The management needs to perform better in order to retain the trust with investors, stakeholders and prospective investors (Rewan Kumar Dahal, et al., 2020). Hence, management accounting can be termed as management-oriented accounting. Management accounting is an integral part of management process as strategic decision-making is dependent on information held and analyzed by the management accountants. Mahfar and Omar (2004) opined that in an organization, management accountants facilitate important information for the purposes of planning, evaluating, controlling and decision-making process. Managers are facilitated by management accounting for doing their functions and perform their roles in an efficient manner (Rewan Kumar Dahal, et al., 2020).

A measure of how effectively an organization utilizes its assets to generate revenue is the main aim of financial performance (Mills,

2008). Financial performance also ensures and provides information about overall financial health of the organization over a given period of time. The financial health of the organizations can be compared across same industry or sectors. The concept of performance measurement signifies that the value of the organization can be increased through cash flows and investment by assessing risk management accordingly (Cadbury, 1992). Various ways to measure financial performance exist which help organizations in achieving their strategic goals. Some of the financial performance indicators are liquidity ratios, Return on Equity (ROE), Return on Assets (ROA) profitability ratios, asset management ratios, market value ratios and leverage ratios. Financial performance also reflects on the performance of the managers in the organizations and predicts the financial health of the organization (Carreta and Farina, 2010).

2. Review of Literature

It was stated by Waweru, Hoque and Uliana (2005) in their study that with the advancement in technology, economic downturn and highly environment of

competition, the environment in which practices of management accounting are conducted has eventually changed. There is a transition from traditional MAPs to new management accounting techniques in organizations such include Activity Based Costing (ABC), target costing, balance scorecard, kaizen approach costing, etc. However, the most remarkable management accounting techniques useful for the organizations with innovation and dependability is activity based techniques, balance scorecard and strategic management accounting (Abdel-Kader and Luther, 2006).

A study by Chan (2002), in Mahfar and Omar (2004) considering Singapore coal companies stated that they were not effective in utilizing costing and management accounting tools as they were hesitant to optimally use advanced techniques such as Activity Based Costing (ABC) and Total Quality Management (TQM). Usage of MAPs was important for companies as they enabled management to acquire applicable information for consequential decision making (Alleyne and Weekes-Marshall, 2011). The supposed significance of cost accounting is determined by declining profitability, escalating costs and competition, along with crisis, recession and downturn in the economy. The study found that companies were inclined to traditional techniques of management accounting and did not give much importance to new MAPs. Three MAPs used by the companies were found in the study: planning and control, budgeting and cost-volume-profit analysis (Uyar, 2010).

A survey by Halbouni (1999) showed that the Jordanian companies were persistently shifting their accounting practices towards new techniques which affected the degree of consistency over time. The compliance level between Jordanian accounting practices and the needs of International Accounting Standards (IAS) was moderate which needed improvement. Al-Hroot, Saadat, and Amireh (2015) assessed the effect of adopting Activity-Based Costing (ABC) on the financial performance of Jordanian industrial

shareholding companies. The usage of the ABC system in the company was the dependent variable, and Margin before Interest and Tax Ratio (MBIT), Gross Profit Margin (GPM), Return on Assets (ROA), Net Profit Margin (ROS), Return on Investment (ROI) and Return on Equity (ROE) were independent variables. The results displayed that variables of performance showed statistically significant direction for the improvement of ratios after implementing the ABC system.

2.1 .Objectives of the Study

- To assess the management accounting practices and financial performance in industrial companies of Jordan.

2.2 Hypothesis of the Study

H₀₁: There is no significant effect of management accounting practices on financial performance of selected industrial companies in Jordan

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3. Research Methodology

This research is based on a quantitative research method where the chosen respondents were 142 based on random sampling method. Primary data was collected using the questionnaire method. A structured questionnaire using 5 points Likert Scale measurement was developed in order to enhance the validity and reliability of the measures. 210 questionnaires were distributed to Chief Financial Officers (CFO), Accountants and Accounting Managers of Jordanian industrial companies out of which only 142 were found suitable for the study. During data entry, 68 questionnaires were rejected as they were incomplete. Hence, the total number of respondents considered for the study was 142. Analytical tests were used to achieve research objectives, for which the data

was fed into SPSS software and the data were analyzed. The data analysis consists of various statistical methods such as descriptive statistics and multiple regression test. The hypothesis was tested using Multiple Regression Models.

3.1 Variables Measurement

For the purposes of the study, the study variables were categorized as independent and dependent variables. Based on the literature

3.2 Data Analysis and Interpretation

reviews studied, the variables were determined in order to assess the effect of MAPs on the financial performance of Jordanian industrial companies.

Independent Variables: MAPs (costing practices, budgeting practices, decision-making practices, performance evaluation practices and strategic analysis)

Dependent Variable: Financial Performance (ROA)

Table 1: Number of Respondents chosen for the Study

Companies	Number of respondents	Percentage
Chemical industries	34	23.9
Mining and Extraction Industries	26	18.4
Pharmaceutical Industries	20	14.08
Textile	30	21.12
Food and beverages	32	22.5
Total	142	100

Source: Compiled by the Researcher

142 responses were collected from selected industrial companies of Jordan out of which 23.9% of the respondents belonged to chemical industries, 18.4% of the respondents belonged to mining and extraction industries,

14.08% of the respondents belonged to pharmaceutical industries, 21.2% of the respondents belonged to textile industries and 22.5% of the respondents belonged to food and beverages industries.

Usage of Costing Management Accounting Practices

Table 2: Usage of Costing Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Activity-Based Costing (ABC)	F	1	21	37	69	14
	%	0.7	14.8	26.1	48.6	9.9
Target Costing	F	0	24	44	61	13
	%	0	16.9	31.0	43.0	9.2
Cost of Quality Reporting	F	11	27	45	46	13
	%	7.7	19.0	31.7	32.4	9.2
Process Costing	F	4	16	40	64	18
	%	2.8	11.3	28.2	45.1	12.7
Segregation of incremental costs, variable cost and fixed costs	F	5	0	20	40	77
	%	3.5	0	14.1	28.2	54.2
Economic Value Addition	F	0	5	65	50	22
	%	0	3.5	45.7	35.2	15.4
Kaizen Approach Costing	F	2	21	32	68	19
	%	1.4	14.8	22.5	47.9	13.4

The usage of cost management accounting practices in industrial corporations is shown in the table above. 48.6% of the respondents stated that Activity-Based Costing was used in their respective companies. 43% of the respondents opined that Target Costing was used in their respective companies. 32.4% of the respondents stated that cost of quality reporting was used in their respective

companies. 45.1% of the respondents opined that Process Costing was used in their respective companies. 28.2% of the respondents stated that respective companies used cost management practices of segregation of incremental costs, variable cost and fixed costs. 47.9% of the respondents opined that Kaizen Approach Costing was used in their respective companies.

Usage of Budgeting Management Accounting Practices

Table 3: Usage of Budgeting Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Budgeting for long-term (strategic) plans	F	4	12	47	72	7
	%	2.8	8.5	33.1	50.7	4.9
Zero-based budgeting	F	2	19	29	58	34
	%	1.4	13.4	20.4	40.8	23.9
Budgeting for controlling costs	F	7	11	36	78	10
	%	4.9	7.7	25.4	54.9	7.0
Flexible budgeting	F	8	19	36	61	18
	%	5.6	13.4	25.4	43.0	12.7
Budgeting for planning	F	5	23	36	53	25
	%	3.5	16.2	25.4	37.3	17.6
Activity- based budgeting	F	0	20	18	94	10
	%	0	14.1	12.7	66.2	7.0
Budgeting with “what if analysis”	F	2	23	20	77	20
	%	1.4	16.2	14.1	54.2	14.1

The usage of budgeting management accounting practices in industrial corporations is shown in the table above. 50.7% of the respondents stated that budgeting for long-term (strategic) plans was used in their respective companies. 40.8% of the respondents opined that zero-based budgeting was used in their respective companies. 54.9% of the respondents stated that budgeting for

controlling costs was used in their respective companies. 43% of the respondents opined that flexible budgeting was used in their respective companies. 37.3% of the respondents stated that respective companies used cost budgeting for planning. 54.2% of the respondents opined that budgeting with ‘what if analysis’ was used in their respective companies.

Usage of Performance Evaluation Management Accounting Practices

Table 4: Usage of Performance Evaluation Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Non-financial measure with respect to customers	F	6	7	27	70	32
	%	4.2	4.9	19.0	49.3	22.5
Non-financial measures with respect to operation and innovation	F	0	15	21	64	42
	%	0	10.6	14.8	45.1	29.6
Non-financial measures with respect to operation and innovation	F	1	20	23	58	40
	%	.7	14.1	16.2	40.8	28.2
Financial measures	F	8	10	34	135	56
	%	5.6	7.0	24.0	45.0	18.7
Economic value added or residual income	F	3	18	26	67	28
	%	2.1	12.7	18.3	47.2	19.7

The usage of performance evaluation management accounting practices in industrial corporations is shown in the table above. 49.3% of the respondents stated that non-financial measures with respect to customers were used in their respective companies. 45.1% of the respondents opined that non-financial measures with respect to operation and innovation were used in their respective

companies. 45% of the respondents stated that financial measures were used in their respective companies. 40.8% of the respondents opined that non-financial measures with respect to operation and innovation were used in their respective companies. 47.2% of the respondents stated that respective companies used economic value added or residual income.

Usage of Decision Making Management Accounting Practices

Table 5: Usage of Decision Making Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Profitability analysis about the product	F	3	6	25	85	23
	%	2.1	4.2	17.6	59.9	16.2
Profitability analysis about the customer	F	2	9	17	71	43
	%	1.4	6.3	12.0	50.0	30.3
Break even analysis or cost volume profit analysis	F	4	10	16	73	39
	%	2.8	7.0	11.3	51.4	27.5
Time value of money and payback period	F	7	9	14	95	17
	%	4.9	6.3	9.9	66.9	12.0

The usage of decision-making management accounting practices in industrial corporations is shown in the table above. 59.9% of the respondents stated that profitability analysis about the product was used in their respective companies. 50% of the respondents opined that non profitability analysis about the

customer was used in their respective companies. 51.4% of the respondents stated that break even analysis or cost volume profit analysis were used in their respective companies. 66.9% of the respondents opined that time value of money and payback period was used in their respective companies.

Usage of Strategic Analysis Management Accounting Practices

Table 6: Usage of Strategic Analysis Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Value chain analysis	F	1	24	68	36	13
	%	0.7	16.9	47.9	25.4	9.2
Shareholder value	F	4	19	57	49	13
	%	2.8	13.4	40.1	34.5	9.2
Analysis of competitors' strengths and weaknesses	F	1	7	21	97	16
	%	0.7	4.9	14.8	68.3	11.3
Industry analysis	F	7	12	25	82	16
	%	4.9	8.5	17.6	57.7	11.3
Analysis of competitive position	F	7	10	21	82	22
	%	4.9	7.0	14.8	57.7	15.5

The usage of strategic analysis management accounting practices in industrial corporations is shown in the table above. 25.4% of the respondents stated that value chain analysis was used in their respective companies. 34.5% of the respondents opined that shareholder value was used in their respective companies. 68.3% of the respondents stated that analysis

of competitors' strengths and weaknesses were used in their respective companies. 57.7% of the respondents opined that industry analysis was used in their respective companies. 57.7% of the respondents stated that analysis of competitive position was used in their respective companies.

Analysis of Importance of Management Accounting Practices

Table 7: Analysis of Importance of Management Accounting Practices

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The MAP helps the companies to compete strategically	F	2	7	42	58	33
	%	1.4	4.9	29.6	40.8	23.2
MAP is dependable as the procedure makes the data provided to management precise and reliable	F	9	20	20	82	11
	%	6.3	14.1	14.1	57.7	7.7
Application of MAP ensures maximum sales and asset value	F	7	43	23	42	27
	%	4.9	30.3	16.2	29.6	19.0
MAP application regulates activities of business through effective planning, coordination, organization and motivation	F	4	32	19	45	42
	%	2.8	22.5	13.4	31.7	29.6
Companies adopt MAP as it ensures integrating perspective to business decision-making	F	17	29	25	42	29
	%	12.0	20.4	17.6	29.6	20.4
The main motive of MAP is to maintain a sustainable long-term competitive advantage	F	9	12	26	59	36
	%	6.3	8.5	18.3	41.5	25.4
Market Capitalization increases with use of MAP in industrial companies	F	11	29	16	55	31
	%	7.7	20.4	11.3	38.7	21.8

The table shows the importance of Management Accounting practices in industrial companies in Jordan. 64.8% of the respondents opined that the MAP helps the companies to compete strategically. 57.7% of the respondents stated that management accounting system is dependable as the procedure makes the data provided to management precise and reliable. 61.3% of the respondents mentioned that MAP application regulates activities of business through

3.3 Testing of Hypothesis

H₀₁: There is no significant effect of management accounting practices on financial performance of selected industrial companies in Jordan

effective planning, coordination, organization and motivation. 50% of the respondents stated that companies adopted MAP as it ensures integrating perspective to business decision-making. 41.5% of the respondents mentioned that the main motive of MAP is to maintain a sustainable long-term competitive advantage. 60.5% of the respondents stated that market capitalization increases with use of MAP in industrial companies.

H₁: There is a significant effect of management accounting practices on financial performance of selected industrial companies in Jordan

Table 8(a): Results of Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794	.630	.322	.1357

Source: Output from SPSS

From the above regression analysis, the value of R obtained was 0.794 and R Square value was 0.630. Further the adjusted R square value

was found to be 0.322 which indicated significance of explanatory variables. The value obtained for standard error of estimate is 0.1357.

Table 8(b): Results of ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.301	1	.301	5.28	.001
Residual	100.811	141	.327		
Total	101.112	142			

Source: Output from SPSS

The Regression ANOVA table revealed significant mean differences in components of management accounting practices (costing practices, budgeting practices, decision-making practices, performance evaluation

practices and strategic analysis) and financial performance (ROA). F test revealed a significant mean difference with F value of 5.28 and significance level of 0.001 which is less than p (0.05) showing statistical significance.

Table 8(c): Unstandardized and Standardized Coefficients with t values and significance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.478	.235		16.614	.000
Costing Practices	2.172	.048	.045	1.847	.001
Budgeting Practices	3.097	.074	.084	-1.214	.003
Decision-Making Practices	3.460	.067	.065	-1.239	.003
Performance Evaluation Practices	3.124	.068	.042	-1.742	.000
Strategic Analysis	3.248	.063	.047	-1.54	.002

Source: Primary Source, Output from SPSS

The regression coefficient of MAPs is 2.172 indicating a positive effect of MAPs on Financial Performance (ROA) which is statistically significant as the significance value is lesser than 0.05 (5%).

4. Conclusion

The management accounting practices provides opportunities to the companies to facilitate quality products and services at reasonable prices to the consumers. With advancement in technology and changing business environment, it is important to assess the effect of adoption of management accounting practices on the financial performance in companies. Hence, the purpose of the study was to assess the effect of management accounting practices on the financial performance in industrial companies of Jordan. The study considered management accounting practices (costing practices, budgeting practices, decision-making practices, performance evaluation practices and strategic analysis) as the independent variables and financial performance (ROA) as the dependent variable. Data collection was done through primary sources where 142 responses were collected using structured questionnaire. Multiple regression test was used to test the hypothesis which found that there is a statistically significant effect of adoption of management accounting practices on the financial performance in Jordanian industrial companies. The companies were

suggested to focus more on developing the management accounting practices as they were key in strategic decision making and improvement of financial performance.

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