

THE USE OF MANAGEMENT ACCOUNTING PRACTICES IN JORDANIAN SMALL-AND-MEDIUM-SIZED ENTERPRISES

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ABSTRACT

This paper seeks to investigate the use of management accounting practices by Jordanian SMEs. The data was generated via questionnaires and interviews. Descriptive statistics on the frequency of the use of individual practices and thematic analysis provide the basis for discussion. The results demonstrate that the usage rates of MAPs in Jordanian SMEs are fairly low in comparison to usage rates reported in the studies conducted in the developed countries and yet are comparable to the rates reported in the studies conducted in the developing countries. MAPs have an essential role in SMEs by enabling determination of product cost information, planning and controlling, issues discovery, evaluation of employees' efforts and customization of management bonuses, generation of relevant information for decisions on expansion process, issuance of new products, prices modification and estimation and prediction of potential risks. The research generates more awareness among the managers of SMEs about the importance of MAPs. Aside from adding valuable knowledge to the body of MAPs in SMEs, this study can be a starting point for further investigations and analysis of MAPs among SMEs.

Keywords: Management Accounting Practices (MAPs), Small and Medium-sized Enterprise (SMEs), Jordan.

INTRODUCTION

Small-and-Medium-sized Enterprises (SMEs) have received significant attention from scholars in the various areas of business management and economics. SMEs are deemed as the economic growth engine owing to the fact that they highly contribute to poverty alleviation through job creation and income generation for the people (Bruque & Moyano, 2007; Dogan et al., 2017; Günerergerin et al., 2012; Lee et al., 2015; Okpara, 2011; Wang et al., 2016).

Within the Jordanian context, as reported in JCI (2015), SMEs constitute 98% of the manufacturing sector. This sector also significantly contributes in promoting the Jordanian dinar exchange rate in light of their stability by supporting the Jordanian foreign currency reserves with over \$8 billion annually. The market share of the sector represents 60% of the total investments that benefit from the investment laws and the sector also contributes to the

achievement of financial stability through its provision of over \$1.4 billion to the treasury every year via direct and indirect taxes.

Furthermore, due to the considerable role of manufacturing firms in the developing economy's growth and development, there is a need for a mechanism that will sustain this sector. In this regard, evidence was provided by AbRahman et al. (2016), Cadez & Guilding (2012), Lachmann et al. (2013), Macinati & Anessi-Pessina (2014), Turner et al. (2017) and Uyar and Kuzey (2016) on the critical role of management accounting practices for firms. MAPs are covered under control tools that improve subunit and overall performance through financial control, planning and controlling of operations, using the firm's resources economically and the creation of value (Horngren, 2009; Uyar & Kuzey, 2016).

In the context of the manufacturing sector, it is crucial for SMEs to use MAPs to furnish timely and authentic information that brings about the facilitation of managerial planning, evaluating and controlling in firms aimed at improving operational efficiency and achieving optimal performance (Azudin & Mansor, 2017). There have been allegations about a lack of relevance of management accounting to managerial needs, especially in modern manufacturing and about the existence of a gap between management accounting theory as portrayed in textbooks and management accounting in practice. Also, Ittner and Larcker (2002) argue that it is difficult to imagine how research in an applied discipline such as management accounting could evolve without the benefit of a detailed examination of actual practice. Similarly, Brierley et al. (2001) argued that there is a continued need for empirical studies to keep track of developments and compare the results with prior research.

At the global level, MAPs have become a phenomenon that has sparked interest amongst many scholars due to the essential role of these tools in firms by enabling determination of product cost information, planning and controlling, issues discovery and prediction of potential risks (Abdel-Kader & Luther, 2006; Angelakis et al., 2010; Armitage et al., 2016; Chenhall & Langfield-Smith, 1998; Pavlatos & Kostakis, 2015; Shields et al., 1991; Uyar & Kuzey, 2016).

Many studies have investigated the use of MAPs in developed countries by focusing on costing practices, budgeting practices, performance measurement and decision support system as evidenced by some studies (e.g. Abdel-Kader & Luther, 2006; Angelakis et al., 2010; Armitage et al., 2016; Nuhu et al., 2017; Pavlatos & Kostakis, 2015; Pavlatos & Paggios, 2008). Also, in the context of developing countries, some studies have discussed the use of MAPs (e.g. Ahmad & Leftesi, 2014; Ahmad, 2013; Ghasemi et al., 2015; Joshi, 2001; Joshi et al., 2011). The disparity in the use of MAPs was evident between developed and developing countries despite the importance of MAPs to the success of organizations.

Nevertheless, MAPs in the developing countries are still in their initial stages and they have not been efficiently utilized by the manufacturing organizations in several developing countries, possibly because MAPs is not a mandatory practice (Azudin & Mansor, 2017). In the case of Jordan as a model for a developing country that has a lot of ambition to be at par with those of other developed and developing countries, previous studies focused on MAPs in the large manufacturing companies, with apparent neglect of SMEs. As a result, the present study attempts to increase the understanding the use of MAPs in Jordanian manufacturing SMEs to contribute to the literature and practice.

The significance of this study can be seen from the fact that the outcome can provide empirical evidence about the extent of use of MAPs in Jordanian manufacturing SMEs. Also, the study outcome provides knowledge about the actual role and various benefits of MAPs for managers and decision-makers in SMEs. The findings of this study may also benefit many other

developing countries with similar political, cultural, environmental and economic conditions, particularly in the Middle East and North Africa region.

LITERATURE REVIEW

The Chartered Institute of Management Accounting refers to management accounting as the delivery of information necessitated by management for policy construction, enterprise activity planning and controlling, forming the decision on alternative courses of action, disclosure to employees and shareholders and protecting assets. Based on this description, it appears that management accounting is now attracting senior management's attention regarding efficiency, strategic planning and value formation. Ittner and Larcker (2002) defined management accounting practices as a variety of methods especially considered for manufacturing firms to support the organization's infrastructure and management accounting processes. Management accounting practices can include costing system, budgeting, performance measurement, information for decision-making and strategic analysis.

In developed countries, studies have been conducted on numerous MAPs including costing, budgeting, performance measurement and evaluation as well as decision support system (Abdel-Kader & Luther, 2006; Chenhall & Langfield-Smith, 1998; Gehrke & Horvath, 2001; Giannetti et al., 2002; Guilding et al., 2000; Hyvönen, 2005; Macinati & Anessi-Pessina, 2014; Pavlatos & Kostakis, 2015; Pierce & O'Dea, 1998; Turner et al., 2017; Wijewardena & De Zoysa, 1999). In the context of Ireland, Pierce and O'Dea (1998) studied the use of MAPs among Irish management accountants and came to a deduction that the traditional methods are still the primarily employed management accounting systems and that the update to more modern techniques (ABC and target costing) was generally low. This indicates that the newer techniques may be used primarily for supplementing, not for the replacement, of the traditional techniques.

On the other hand, Australian companies appear to show a fairly high level of adoption of management accounting techniques in comparison to other countries. The adoption rates of traditional MAPs were also generally higher in comparison to the adoption of the current techniques. In particular, the higher adoption levels were reported on budgeting, planning and performance evaluation. In contrast, the levels of adoption for target costing, value chain analysis and ABC were reported to be lower (Chenhall & Langfield-Smith, 1998).

In Japan and Australia, Wijewardena and De Zoysa (1999) conducted a comparative study on MAPs in large manufacturing firms and found several crucial differences between these countries. The authors found that in adopting MAPs, Australian companies appeared to stress the tools of cost control including budgeting, standard costing and variance analysis at the manufacturing stage. Comparatively, the Japanese companies concentrated more on the tools of cost planning and cost reduction according to target costing at the stage of product planning and design. This is, in fact, the most common difference between these two countries. Additionally, it appears that the Japanese companies have brought forth more repeated changes to MAPs in comparison to the Australian companies. Further, in a multi-country study conducted by Guilding et al. (2000) examining the use of SMA tools in the UK, US and New Zealand, it was found that most SMA tools are not widely used except the competitor accounting and strategic pricing. Meanwhile, in the context of large and medium-sized industrial companies in Italy, Giannetti et al. (2002) reported that in management accounting systems, the measures of non-financial performance were typically employed in combination with the measures of financial performance.

In a comparative study on several European countries, Gehrke and Horvath (2001) reported that companies in the United Kingdom, Italy, France and Germany with participation rates of 83%, 72%, 41% and 98%, respectively, are familiar with BSC. Meanwhile, in Finland, Hyvönen (2005) documented the adoption of the MAPs with respect to its degree, the alleged benefits from their application and the established purposes for future developments in these practices. Based on the outcomes, the author deduced that financial measures including product profitability analysis and budgeting for controlling costs will still be crucial in the future. However, the author stated that greater emphasis should be placed on more recent non-financial practices including surveys on future customer satisfaction and employee attitude.

In a MAPs survey in the industry of food and drinks in the UK, Abdel-Kader & Luther (2006) reported the continuous usage of traditional management accounting while there appears an increased application of information on quality cost, non-financial measures pertinent to employees as well as analysis of rivals with respect to their strengths and weaknesses. The authors also indicated that concerning the study item on target costing, 57% of the 112 sample companies employed it to a different degree, once again demonstrating the existence of a gap between the practices mentioned in the textbooks and those actually in practice.

On the other hand, many researchers in the domain of management accounting conducted studies on numerous MAPs including budgeting, costing, performance measurement and evaluation and decision support system in developing countries (AbRahman et al., 2016; Ahmad & Leftesi, 2014; Ahmad, 2013; El-Ebaishi et al., 2003; Frezatti, 2007; Ghasemi et al., 2015; Joshi, 2001; Sulaiman et al., 2004; Uyar & Kuzey, 2016; Waweru et al., 2004; Wu et al., 2007).

In this regard, Joshi (2001) studied MAPs in the sectors of manufacturing and services in India and found that the application of traditional MAPs, including budgeting and performance evaluation, was higher in comparison to the application of the present techniques. Also, with respect to change in management accounting over time among four African retail companies, Waweru et al. (2004) reported significant changes in management accounting systems in each of the companies. These changes include the increased application of modern MAPs, especially the ABC allocation systems and the BSC for the measurement of performance. In addition, in summarizing MAPs in each of China, Singapore, India and Malaysia, Sulaiman et al. (2004) stated the lack of usage of the contemporary management accounting in these countries. However, the traditional management accounting techniques are still widely used. Among the possible causes are an unawareness of the new techniques, no expertise and lack of support from top management.

In terms of the level of adoption of MAPs in China, Wu et al. (2007) argue that the MAPs was primarily impacted by the enterprise's type of ownership. It is believed that techniques including budgeting and target costing are more valuable for state-owned enterprise than for joint venture. Somehow, responsibility accounting and accounting for decision making is considered to be not as valuable to the state-owned firms as they are to the joint venture. Meanwhile, in the examination of MAPs among the medium and large companies operating in the sectors of manufacturing and non-manufacturing in Brazil, Frezatti (2007) reported lower adoption of the current MAPs (e.g. ABC, BSC and economic value added) in comparison to the adoption of the more traditional practices, for instance, budgeting. On the other hand, El-Ebaishi et al. (2003) claimed that the manufacturing firms in Saudi Arabia perceive the traditional management accounting techniques as important. In fact, the traditional management accounting techniques have been heavily employed by the Saudi firms. Meanwhile, new management accounting

techniques including JIT and ABC are employed similar to those reported in developed countries.

Furthermore, Ahmad & Leftesi (2014) examined MAPs in manufacturing companies. The authors looked into the stages of evolution of management accounting in the country and found that the manufacturing companies in Libya showed a heavy reliance on traditional management accounting techniques. The authors also indicated the low adoption rates of the modern or advanced tools. Ahmad (2013) studied the traditional MAPs (e.g. conventional budgeting, traditional costing and financial performance measures) and found that they were extensively employed by manufacturing companies in Malaysia. The author indicated a greater dependency on financial measures than on non-financial measures. As for the context of Iran, Ghasemi et al. (2015) reported higher usage of the traditional management accounting techniques in comparison to the use of newly developed techniques among the firms.

Specifically, with regard to SMEs, Hopper et al. (1999) studied cost accounting in SMEs in Japan and concluded that costing systems in SMEs in the country were identical with those implemented by the large Japanese firms. In the context of the UK, Jarvis et al. (2000) indicated that the small firms pursue a range of goals and this is the reason for the usage of a multitude of measures and indicators for assessing business performance among these firms. Also in this study, cash flow indicators were deemed important while profit measures were reported to be less critical in comparison to what is suggested by the conventional views. In a similar context, Reid and Smith (2000) found a minority of small firms in the UK used budgets technique, that payback was the most often used technique of investment appraisal and that management accounting system has significantly impacted firms in terms of firm performance.

In sum, it can be deduced that research into MAPs in the context of SMEs is restricted and is mainly linked to advanced countries. As stated by Mitchell and Reid (2000), the empirical management accounting research designed to study technical innovation and development is focused on larger firms, with the obvious exclusion of smaller firms where the expertise and capability to innovate in management accounting is less prone to exist. Thus, such situation generates a substantial opportunity for the study of MAPs within the context of SMEs.

RESEARCH METHODOLOGY

As each research strategy carries certain disadvantages, qualitative and quantitative research approaches have been used in combination to optimally deal with the research issue. This combination is called the mixed-methods research (Creswell & Clark, 2007; Johnson et al., 2007). Owing to different viewpoints of researchers, there are numerous definitions of the mixed-methods approach (Johnson et al., 2007). Among the differences in the definition include what was being mixed, for instance, methods and methodologies, the research process's location where the mixing occurs, for instance data gathering and data analysis and the reason for mixing, for instance, corroboration and breadth. Combining these different views, Johnson et al. (2007, p. 123) describe the mixed-methods research as

"The type of research in which a researcher or team of researchers combine elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of the breadth and depth of understanding and corroboration".

The application of mixed-methods compensates the shortcoming of one single approach as the advantage of one method covers the disadvantage of the other and this leads to the

attainment of the best results (Creswell & Clark, 2007; Johnson & Onwuegbuzie, 2004; Jonsen & Jehn, 2009). Using mixed methods, the researcher could present data generalization from the quantitative approach while also having the capacity to generate data that are ‘thick and rich’ from the employment of qualitative methods (Teddlie & Tashakkori, 2009). The combination of the quantitative and qualitative methods gives researcher better comprehension of the research problems and in addressing the research issue, in comparison to employing only one approach (Creswell & Clark, 2007; Hohenthal, 2006). Also, Teddlie and Tashakkori (2009) and Creswell & Clark (2007) stated the ability of mixed methods in increasing the study’s validity.

The study has used a questionnaire and interviews to investigate the use of management accounting practice in Jordanian SMEs based on the perception of heads of accounting departments/financial managers. According to Sekaran & Bougie (2016), the determination of sample size takes into account the factors of cost and time. In relation to this, there are approximately 1139 manufacturing companies registered in the local chambers of industry in Jordan, where SMEs represent 98% of the industrial sector (JCI, 2015). According to Sekaran & Bougie (2016), probability sampling allows all respondents an equal opportunity to be chosen as an object of a sample. This sampling method prevents bias on the researcher’s part (Salkind & Rainwater, 2003). Further, this study attempts to generate samples derived from diverse types of manufacturing SMEs. As such, the study used the simple random sampling method by distributing 291 questionnaires.

The questionnaire comprises two primary sections; Section One comprises the questions covering the company’s demographic aspects; Section Two includes thirty-seven items to determine the management accounting practices based on four dimensions: Costing practices, budgeting practices and performance measurement system and decision support system. In particular, the measures were adopted from previous studies (Abdel-Kader & Luther, 2006; Ahmad, 2013; Chenhall & Langfield-Smith, 1998).

The data collected using the questionnaire over the period of five months from June 2016 to November 2016 shows that 159 usable questionnaires were received. Respondents were asked to indicate the frequency of use of MAPs using a five-point Likert-type scale. In particular, the scales range from S1 which is indicating “never” and S5 which is denoting “always.” MAPs usage extent is extracted utilizing the portion of respondents who selected “often” (S4) or “always use” (S5) on the method or technique. This gives an extra measure of usage alongside the existence of the possibility that responses on scale S2 “rarely” and S3 “sometimes” are signifying awareness instead of actual usage. It is possible that these figures will give a more accurate indication of the actual usage of MAPs. This is because respondents who actually utilize the particular techniques will unquestionably select S4 and S5 (Abdel-Kader & Luther, 2006; Ahmad, 2013). Furthermore, thematic analysis was used for analyzing semi-structured interviews with heads of accounting departments in six Jordanian manufacturing SMEs.

SURVEY RESULTS AND DISCUSSION

Background Information on Responding Companies

In the survey phase, respondents were asked to provide background information of their companies. The summary of the essential characteristics of their companies, such as company age, manufacturing activities, number of employees, annual sales and type of ownership are provided in Table 1.

Table 1 BACKGROUND INFORMATION OF RESPONDING COMPANIES			
Years of Operation	Frequency	Percentage	Cumulative Percentage
6-10 years	19	12	0
11-15 years	38	24	12
More than 15 years	102	64	36
Total	159	100	100
Manufacturing Activities	Frequency	Percentage	Cumulative Percentage
Food and beverages	38	24	0
Electronic	19	12	24
Leathers and clothing	24	15	36
Pharmaceutical and medical	19	12	51
Chemical	54	34	63
Other	5	3	97
Total	159	100	100
Number of Employees	Frequency	Percentage	Cumulative Percentage
10-49	43	27	0
50-249	116	73	27
Total	159	100	100
Annual Sales Turnover (in Jordan Dinars)	Frequency	Percentage	Cumulative Percentage
1-3 million JD	49	30.8	0
More than 3 million JD	110	69.2	30.8
Total	159	100	100
Type of Ownership	Frequency	Percentage	Cumulative Percentage
Government-owned company	10	6.3	0
Private company	114	71.7	6.3
Shared between the private sector and foreign partner	22	13.8	78
Shared between government and private sector	13	8.2	91.8
Total	159	100	100

Note: Jordanian Dinar (JD) =1.41 US Dollar (\$)

For years of operation, Table 1 shows that 64% of companies had been operating for over 15 years, 24% of companies had been operating for 11-15 years and only 12% had been operating for 6-10 years. This demonstrates that nearly all respondent companies were substantially experienced in their field of operation. In general, the manufacturing activities of responding companies were concentrated in chemical products at 34% and food and beverages at 24%. The next principal areas were leathers and clothing, electronics and pharmaceuticals and medicine at around 15%, 12% and 12% of respondents, respectively. The lowest responding activity areas were other, with only 3% of respondents.

About 73% of respondent companies employed 50 to 249 employees, while 27% of the respondent companies employed 10 to 49 employees. This study reported that 69.2% of companies had an annual sales turnover of more than 3 million JD, while 30.8% had an annual sales turnover of 1-3 million JD. Such outcomes denote a higher response rate among medium-sized companies in comparison to small companies. Ownership type shows that 71.7% of responding companies were private companies, 13.8% were a joint venture between the private

sector and a foreign partner, 8.2% of them were a joint venture between the government and a private partner and only 6.3% of them were government-owned companies. This makes these companies appropriate for representing a good sample.

Usage Rate of Management Accounting Practices

Based on Table 2, most of the manufacturing SMEs applied all the listed MAPs except activity-based costing (ABC), absentee rates measures and employee turnover measures, which represent 8.1% of MAPs. Additionally, the study found 11 practices that signify 29.7% of MAPs which are high use rates by at least 70% of the SMEs, 10 practices that signify (27%) of MAPs which are moderate use rates by at least 35% of the SMEs and 13 practices that signify (35.2%) of MAPs which are low use rates as these practices were used by less than 35% of the SMEs.

Table 2 DESCRIPTIVE STATISTICS FOR USAGE RATES OF MAPS				
Management Accounting Practices	Usage Rate percentage %	Mean	Standard Deviation	Rank
High Usage				
Process costing	100	4.22	0.42	1
Budget frequency/Annually	99.4	4.49	0.51	2
Sales growth	93	4.29	0.688	3
Financial position budget	84.3	4.34	1.34	4
Job costing	84.3	4.14	0.83	5
Operating income	83	4.21	0.712	6
Cash flows	81.8	4.26	0.813	7
Product profitability analysis	81.1	4.23	0.941	8
Variable costing	79.9	3.84	0.46	9
Cash flow budget	76.7	4.10	1.24	10
Production budget	74.8	4.31	0.92	11
Moderate Usage				
Absorption costing	68.5	3.60	0.67	1
Break-even analysis	61.6	3.58	1.149	2
Payback	59.8	3.43	1.250	3
Capital budgeting	53.5	3.16	1.85	4
Target costing	53.4	3.57	0.56	5
Net present value	47.8	3.16	0.974	6
On-time delivery	45.3	3.82	0.945	7
Defect rate	44.7	3.70	0.848	8
Zero-based budgeting	40.3	2.90	1.60	9
Standard costing	37.1	3.37	0.48	10
Low Usage				
Budget frequency/Monthly	34	2.80	1.72	1
Internal rate of return	31.5	3.19	0.995	2
Number of warranty claims	29.6	2.79	1.044	3
Return on investment	22	3.35	0.746	4
Batch costing	21.4	3.09	0.83	5
Variance analysis	19.5	3.18	0.967	6
Stock control model	15	2.76	0.845	7
Flexible budget	11.3	3.04	0.70	8
Survey of customer satisfaction	10	2.91	0.924	9
Accounting rate of return	6.3	3.10	0.409	10
Manufacturing lead time/cycle time	6.3	2.53	1.066	11

Table 2 DESCRIPTIVE STATISTICS FOR USAGE RATES OF MAPS				
Management Accounting Practices	Usage Rate percentage %	Mean	Standard Deviation	Rank
Contract costing	5	2.89	0.64	12
Number of customer complaints	1	3.00	0.225	13
Never Use				
Employee turnover	0.0	1.21	0.578	1
Absentee rates	0.0	1.12	0.495	2
Activity based costing (ABC)	0.0	1.11	0.37	3

Note: Usage rate equation= number of practices divided on total MAPs (37)

(High usage, 70% and above): $11/37 = 29.7\%$, (moderate usage, 35% to 70%): $10/37 = 27\%$, (low usage, less than 35%): $13/37 = 35.2\%$, (never use 0%): $3/37 = 8.1\%$

As demonstrated by these findings, manufacturing SMEs in Jordan show fairly lower MAPs usage rate. This differs from the findings of previous studies that have looked at the same domain. Among the companies in India, for example, an adoption rate of 70% or less was deemed low while 14 MAPs were used by at least 80% of the investigated companies (Joshi, 2001). Meanwhile, within the context of Australia, Chenhall & Langfield-Smith (1998) reported that 80% or less adoption was classified as a low adoption rate and 15 MAPs were implemented by at least 90% of the companies while additional 16 practices were applied by at least 80% of the companies. In the context of Finland, Hyvönen (2005) reported that 20 MAPs were implemented by at least 90% of the companies and adoption rate of 82% or less were classified as low.

Likewise, the findings of this study show the similar rate of usage of MAPs among Jordanian manufacturing SMEs with those from the study of Ghasemi et al. (2015) in Iran and of Ahmad (2013) in Malaysia. The result also demonstrates that the rates of MAPs usage in Jordanian manufacturing SMEs are higher than those of Arab countries such as Libya (Ahmad & Leftesi, 2014). Referring to Table 2, the high level of MAPs usage in Jordanian manufacturing SMEs consists of process costing (100%), annual budgeting systems (99.4%), sales growth (93%), financial position budget and job costing (84.3%), operating income (83%), cash flows (81.8%), product profitability analysis (81.1%), variable costing (79.9%), cash flow budget (76.7%) and production budget (74.8%).

Regarding MAPs popularity, these findings support the findings of some past studies conducted by Ahmad & Leftesi (2014), Ahmad (2013), Chenhall & Langfield-Smith (1998), Hyvönen (2005) and Joshi (2001). However, these authors indicated higher use rates in their study in comparison to the rates reported for Jordan in this study even though they had completed their study a few years before. As an example, in this study, the use rate of product profitability analysis is at 81.1%, which is similar to Chenhall & Langfield-Smith (1998) finding in Australia which shows 89% of use rate for the same practice twenty years prior. As for the decision support system practices, net present value practice has been moderately implemented. In this matter, Ghasemi et al. (2015) and Ahmad & Leftesi (2014) reported similar outcomes for Iran and Libya, respectively. In contrast, ABC and non-financial measures were the less implemented MAPs in this study as also reported by Ahmad (2013) in Malaysia, Ahmad & Leftesi (2014) in Libya and Ghasemi et al. (2015) in Iran.

Based on these findings, the unpopularity of advanced MAPs is affirmed; this has in fact been indicated by the past works as well. The result of this study is consistent with the viewpoint of Guilding et al. (2000), who in a multi-country study reported low usage rates for advanced MAPs. Also, the outcome of the study provides affirmation of the non-existence of attention on

such techniques which can also be seen in some previous studies by Ahmad & Leftesi (2014), Bergamin et al. (1996), Saez-Torrecilla et al. (1996) and Szychta (2002). In essence, within the manufacturing SMEs in Jordan, the usage rates of MAPs are fairly low in comparison to usage rates reported in the studies conducted in the developed countries and yet are comparable to the rates reported in the studies conducted in the developing countries.

INTERVIEW RESULTS AND DISCUSSION

The purpose of the interview was to explore the role of management accounting practices in Jordanian manufacturing SMEs. At the same time, these findings may generate new issues and ideas that future studies could explore. The analysis was performed on the interview transcripts by way of thematic analysis described by Boyatzis (1998) and Braun & Clarke (2006). Described differently, this type of analysis refers to a method that involves the identification, analysis and reporting patterns (themes) inside the data (Braun & Clarke, 2006). Innovation diffusion theory underpins the themes for the role of MAPs in SMEs generated during the coding.

The Role of Management Accounting Practices in Jordanian SMEs

In different dialogues, interviewees confirmed the use of MAPs for different purposes. In particular, it was affirmed that fixed cost, variable cost, standard cost and target cost systems were used to generate relevant information for strategic purposes. This involves reducing costs and product pricing to meet market competition. In addition, interviewees confirmed the use of costing tools for determining accurate product cost information and preventing the production of distorted product cost information that may influence selling prices, budget preparation and decision-making. The opinions of interviewees are consistent with Chenhall (2005) and Kaplan and Cooper (1998), who indicated that cost practices are adapted to generate relevant information for strategic purposes involving product planning such as product pricing and for managerial purposes such as cost reduction. The following statements are evidence of these views:

“We are using fixed cost, variable cost, standard cost systems and target cost, for determining the accurate product cost information and avoiding the production of distorted product cost information for determining the selling prices” (Company A).

“Our company uses standard costs and target cost to reduce the costs. This is because the competition in the market causes inability to increase our product prices” (Company B).

“We are using the variable costs, target costs and standard costs to serve the company strategy...such as pricing the products and budget preparation” (Company C).

The interviewees confirmed that budget practices in their companies were of meaningful importance, as budgets are perceived as financial plans that provide information for planning, controlling and discovering problems. In addition, interviewees indicated the crucial role of budgets for financial planning and controlling costs and expenses. The interview findings are consistent with previous studies in management accounting such as Chenhall and Langfield-Smith (1998), Joshi (2001) and Tsamenyi et al. (2004), who claimed that the essential purpose of budget systems are planning and control. The interview findings also are consistent with Uyar and Kuzey (2016), who indicated that the purpose of various MAPs is to improve subunit and overall unit performance through financial control, operation planning, operation control,

economic use of business resources and value creation. The following statements are evidence of these views:

“Primarily for financial planning and operation and controlling costs and expenses, we are using sales and production budgets” (Company A).

“By relying on budgeting system for planning and control of the costs, we can discover problems and try to solve them” (Company B).

“We believe the budget system is one of the success tools, through translating the plans and using the financial resources for a future period on a yearly basis to perform the functions of planning, control and motivation within our company” (Company C).

He added:

“In fact, the budgets prepared for planning should be realistic, whereas budgets used for motivating purpose are required to be based on possible outcomes” (Company C).

The interview results indicate that Jordanian manufacturing SMEs use numerous financial measurements to determine if the results over a certain period are as expected or are contrary to expectations, as well as to predict potential risks. In addition, interviewees confirmed the use of financial performance indicators with quarterly budgets to ensure satisfactory company performance. Furthermore, performance measurement is an important tool used to evaluate employee efforts and customize management bonuses. The interview findings on performance measurement tools are consistent with previous studies by Chenhall & Langfield-Smith (1998) and Hyvönen (2005). The following comments illustrate this:

“These practices are like tissues that are linked to one another. For example, we apply performance measurement systems, both financial and non-financial, to become a control and measure system, for instance, we are evaluating sales growth, earnings, cash flow and level of customer satisfaction. Also through the analysis tools, we can forecast risks surrounding our company” (Company A).

“We are linking the financial performance indicators with the quarterly budgets to ensure that our company performance is going in the right way” (Company B).

He added:

“In other words, measurement tools help us to determine that the results of the period are as expected or contrary to expectations” (Company B).

“Through measurement tools, we measure the returns and growth of revenue, which is itself a control system that serves the interests of our company” (Company C).

He added:

“We evaluate the efforts of employees and customize the management bonuses based on performance indicators” (Company C).

Interviewees confirmed the use of decision support tools for different purposes. In particular, it was affirmed that financial returns and product profitability analysis were used to generate relevant information for expansion, issuing new products, modifying prices and

estimating potential risks. In addition, manufacturing SMEs rely on product profitability analysis in order to get rid of products that are not financially feasible.

The interviewees also confirmed that the purpose of some tools such as return on investment and payback period were of meaningful importance, as they provide information for the evaluation of new projects and possible investments. As presumed by interviewees, decision support tools benefit organizations via the management of risks related to products and pricing using profitability analysis outputs. The interview findings on decision support tool roles are consistent with Abdel-Kader & Luther (2006). The following statements are evidence of these views:

"In fact, through relying on using the output of financial returns and product profitability analysis, we take decisions on expansion process, issue new products, modify the price and estimate the potential risks" (Company A).

He added:

"Of course we analyze the profitability of each product separately because of the variety of our products" (Company A).

"We are relying mostly on product profitability analysis to get rid of the products that are not financially feasible" (Company B).

He added:

"For evaluating the new projects and investments expansions, we are using return on investment and payback period because of its simplicity and ease of use" (Company B).

"We seek to manage risks related to our industry in a complex sector and high-level competitiveness that surrounds Jordan by using the output of return on investment and profitability analysis...risks from products failures at any phase in production, development and pricing" (Company C).

The interviewees confirmed that traditional management accounting tools still provide benefits to their companies. In different dialogues, interviewees confirmed the use of traditional budgets for financial planning, performance control and performance assessment using timetables. In addition, interviewees confirmed the use of direct cost tools to determine product cost information. They also performed yearly calculations of financial returns using financial measurements.

Some interviewees indicated shortcomings in traditional management accounting tools, as they faced some difficulties in adjusting product costs, understanding price fluctuations and understanding consumer behaviour. Although there are criticisms of traditional management accounting tools, the viewpoints highlighted below affirm the crucial role played by traditional management accounting tools in Jordanian manufacturing SMEs. This is illustrated by the following comments:

"Actually, we are using budgets as an instrument of planning, control and assessment of the performance, through the development of timetables to perform specific programs and plans" (Company D).

He added:

"Yes as I mentioned to you, we believe the budgets system is one of the success tools, through planning on using the financial resources for a future period on a yearly basis" (Company D).

He added:

“But we are facing some difficulties...In regards to market behaviour; we are unable to understand what is happening from fluctuations in prices. In addition, we are unable to understand consumers’ behaviour...of course, we tried and are still trying to predict what is happening based on the outputs of our systems, but we believe that the results are not precise yet” (Company D).

“In fact, we are using direct costs and budgets system for the planning process and controlling costs. Also, we calculate our yearly financial returns...we believe it is sufficient to service our company strategy to some extent ...but we have difficulties in adjusting the cost of the product” (Company E).

“In general we are using the traditional budgets and cost accounting system. Also, we calculate the financial returns. Furthermore, we are covering the required information about the competitors through marketing staff gave the limited financial resources of the company” (Company F).

As assumed by the viewpoint of pro-innovation, innovations will generate benefits to the organizations that employ those (Rogers, 2010). Based on this standpoint, if innovations are beneficial to the adopter, indeed they will diffuse. As can be deduced from the interview findings, MAPs are adding benefits to manufacturing SMEs, which is consistent with Rogers’s viewpoint.

DISCUSSION

The results show that the majority of respondents make use of MAPs in their firms. Without any doubt, the study findings are in support of the findings of a number of past studies on MAPs popularity such as those conducted by Joshi (2001) in India, Chenhall & Langfield-Smith (1998) in Australia, Hyvönen (2005) in Finland, Ahmad (2013) in Malaysia and Ahmad and Leftesi (2014) in Libya. However, some of these countries demonstrate higher usage rates in comparison to Jordan despite the fact that these studies were conducted a few years earlier.

Among the Jordanian manufacturing SMEs, the rates of usage of MAPs appear to be fairly lower than the rates reported in developed countries such as that conducted in Australia by Chenhall & Langfield-Smith (1998), in the UK, US and New Zealand by Guilding et al. (2000), in Finland by Hyvönen (2005), in UK by Abdel-Kader & Luther (2006), in Slovenia by Cadez & Guilding (2007), in Greece and Finland by Angelakis et al. (2010), in Greece by Pavlatos and Kostakis (2015), in the Canadian and Australian SMEs by Armitage et al. (2016) and in the Australian public sector organizations by Nuhu et al. (2017). On the other hand, this finding is comparable to the usage rates reported in the developing countries, for instance, the usage rates reported by Ghasemi et al. (2015) in Iran and by Ahmad (2013) in Malaysia. The results also demonstrate a higher MAPs usage rates among Jordanian manufacturing SMEs as opposed to the usage rates reported in Arab countries such as Libya (Ahmad & Leftesi, 2014).

The findings led to the creation of several new outcomes on the usage of MAPs by Jordanian manufacturing SMEs. In essence, there has been quite a broad adoption of the basic techniques of management accounting among Jordanian manufacturing SMEs. These include the adoption of costing systems, budgeting systems and measures of financial performance. This prioritization of basic techniques of accounting and management accounting is perhaps expected in the context of a smaller firm. Furthermore, since the respondents are based in a developing country, the employment of new management accounting tools, such as ABC, non-financial performance measures and other modern techniques, might be expected to be lower than in developed countries. This view is in line with Chun et al. (1996) who claimed that Singapore

firms prefer to employ traditional management accounting systems to meet their needs for external and internal reporting purposes.

Other research in developing countries also supports this position, such as that conducted by Joshi (2001) in India, El-Ebaishi et al. (2003) in Saudi Arabia, Ahmad (2013) in Malaysia and Ahmad & Leftesi (2014) in Libya. For example, Joshi (2001) argued that the reasons for a low adoption of newly developed MAPs in Indian firms are the conservative attitude of Indian management, autocratic leadership and long-term orientation. They also suggest that many Indian companies believe that it is quite expensive to adopt the new management accounting techniques. As for developed countries, although there is an increase in usage of modern MAPs, the traditional MAPs are still dominant in most firms (Abdel-Kader & Luther, 2006; Chenhall & Langfield-Smith, 1998; Pierce & O'Dea, 1998).

Based on the study findings, it appears that the high acceptance of traditional techniques may be attributed to the fact that information and expertise relating to these measures is the most readily available as opposed to that relating to modern management accounting techniques. Also, sophisticated systems are not widely adopted in practice possibly due to the uncertainties, practicalities and costs involved in obtaining the information. Thus, it appears that there is a gap between the theoretical side and how management accounting is done in actual practice at least in the context of Jordanian manufacturing SMEs. This finding is in line with the findings of some past studies by Ashton et al. (1995), Drury et al. (1993) and Scapens (1985) which reported a gap existing between the textbook theoretical prescriptions and how management accounting is actually done.

The interview findings suggested that variable cost, fixed cost, standard cost systems and target cost are employed to generate relevant information for strategic purposes. This involves cost reduction and pricing the products to enable the organization to compete in the market. Further, the interviewees confirmed the use of costing tools for determining the accurate product cost information and preventing the production of distorted product cost information that may influence selling prices, budget preparation and decision-making. In this regard, Chenhall (2005) and Kaplan & Cooper (1998) also documented the same finding, where they reported the adoption of cost practices in generating relevant information for strategic purposes which involves product planning including product pricing and for managerial purposes including cost reduction.

As equally affirmed by the findings, budgets practice appears to be considered important; where budgets are viewed as financial plans that make available information for the purpose of planning and controlling and for uncovering problems. The interviewed respondents also mentioned the considerable role of budgets for financial planning and controlling both the costs and expenses. These outcomes are consistent with the previous studies conducted by Chenhall & Langfield-Smith (1998), Joshi (2001), Tsamenyi et al. (2004) and Uyar and Kuzey (2016) where it was pointed out that the purpose of various MAPs is to improve subunit and overall performance through financial control, planning and controlling of operations, using business resources economically and the creation of value.

The utilization of financial measures appears to have numerous advantages. As demonstrated by the outcomes, financial measures are useful in ascertaining that the outcomes of the period are as anticipated or contradictory to the expectations. The measures can also predict whatever risks surround the company. This gives assurance that the company's performance is going well. The findings show performance measurement to be an essential tool. It is used in the

evaluation of employees' efforts and for customizing management bonuses, which is consistent with viewpoints of Chenhall & Langfield-Smith (1998) and Hyvönen (2005).

As shown by the findings, decision support tools were indeed used and the usage was for different purposes. For instance, financial returns and product profitability analysis were employed in creating the relevant information in the decisions on the process of the expansion process, issuance of new products, price modification and estimation of the potential risks. Apart from that, manufacturing SMEs demonstrate reliance on product profitability analysis in enabling them to get rid of the financially unfeasible products. Also, the findings affirmed the purposes of return on investment and payback period in the respondents' companies as having meaningful importance. According to the respondents, both returns on investment and payback period provide information during the assessment of the new projects and investment expansion. Without any doubt, the current outcomes of the role of decision support tools are clearly consistent with the result of the study conducted by Abdel-Kader & Luther (2006).

In fact, the traditional management accounting tools remain in use, where the interviewees affirmed the usage of traditional budgets for the purposes of financial planning, control and performance evaluation using timetables in the performance of specific programs and plans. They also affirmed the utilization of direct cost tools in their determination of product cost information. Further, using financial measures, the respondents computed their annual financial returns. Meanwhile, the shortcomings of traditional management accounting tools were also reported. There appear some difficulties in adjusting the cost of products and in understanding the price fluctuations and consumer behaviour. Somehow, despite the reported limitations, the significant role of traditional management accounting tools in Jordanian manufacturing SMEs cannot be denied. In fact, it is expected that the traditional management accounting tools will remain in use in the days and years ahead. Such persistent usage may be linked to the perceived benefits derived from the traditional techniques, according to the cost-benefit motivation.

It is important to mention here that these MAPs will generate benefits to the organizations that employ them through improving subunits and overall performance through financial control, planning and control of operations, using business resources economically and the creation of value, which is consistent with viewpoints of Horngren (2009) and Uyar & Kuzey (2016).

CONCLUSION AND RECOMMENDATION

The results demonstrated that the usage rates of MAPs in Jordanian SMEs are fairly low in comparison to usage rates reported in the studies conducted in the developed countries and yet are comparable to the rates reported in the studies conducted in the developing countries. MAPs have an essential role in SMEs by enabling determination of product cost information, planning and controlling, issue discovery, evaluation of employees' efforts and customization of management bonuses, generation of relevant information for decisions on expansion process, issuance of new products, prices modification and estimation and prediction of potential risks. Considering the various benefits, the managers and decision-makers in SMEs must increase adoption and use of MAPs due to its essential role in their firms, which was asserted by many researchers who provided evidence that MAPs usage enhances organizational performance, for instance, Cadez & Guilding (2008), Macinati & Anessi-Pessina (2014) and Turner et al. (2017). As well, the government of Jordan should make more efforts to promote MAPs usage by providing tax exemptions as an incentive.

This study is providing knowledge of MAPs in SMEs in a developing country as well as responding to calls for research into MAPs in small firms by a number of researchers (AbRahman et al., 2016; Armitage et al., 2016; Azudin & Mansor, 2017; Hopper et al., 2009; Mitchell et al., 1998; Mitchell & Reid, 2000; Shields & Shelleman, 2016). Additionally, the past works in this domain are descriptive in nature; they merely report MAPs rates of adoption. Also, few previous researches have exclusively addressed the purpose of the usage of MAPs. As such, through the statistical description and the analysis of interview, this study significantly contributes to the understanding of the use of MAPs in the context of Jordan. It is then appropriate to consider this study as positively contributing to generating more awareness among the managers of SMEs about the importance of MAPs. Specifically, the study findings will promote interest among researchers in developing countries, to take the SMEs sector as a focus of interest for their research. Also, the study can be a starting point for further investigations and analysis of MAPs among SMEs in the context of Jordan.

The sample of the study was restricted to Jordanian manufacturing SMEs. As such, the findings are not generalizable to other organizations in other industries. Concentrating on other sectors including the service sector may be beneficial. Then, a comparison should be made between the outcomes from both sectors. This way, the possibility of generalizing the outcomes would be increased. Further investigations and analysis about the reasons that stimulate or hamper the use of MAPs will be interesting.

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