The Effect of Firm Size on the Customer Accounting Information Usage; Evidences from Jordan

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Abstract

The purpose of this study is to contribute to the area of strategic management accounting (SMA), particularly Customer Accounting (CA) Information by explaining the firms' size effect on the extent of usage of CA information in Jordanian service companies. The population for this study was all services companies that listed in Amman stock Exchange in 2010. Using one-way ANOVA, the results of the study indicated that only the use of one CA information dimension (lifetime customer profitability analysis) showed significant differences across the firms' size. However, the extent of usage of the remaining CA information dimensions shows no significant differences across the firms' size.

Keywords Strategic Management Accounting, Customer Accounting Information, Firm's size, Jordanian services companies.

Paper type: Empirical Paper

1. Introduction

Since the 80s a new term has been created in Management Accounting literature it was Strategic Management Accounting (SMA) by Simmonds (1981). In the following two decades, and still today, discuss about what SMA comprises has been originated. It is well common that SMA is identified as a generic approach to accounting for strategic positioning (Roslender & Hart, 2003). This wide definition leaves unexplained the problem to define what is intended with the expression "SMA techniques". In general, it has been argued that the "strategic" characteristic embraces those practices highlighting an external or the future focus (Cravens & Guilding, 2001; Guilding, Cravens, & Tayles, 2000; Roslender & Hart, 2003). Simmonds (1981) identified SMA as an external emphasis advocating a focus on competitor information. Bromwich (1990) defined SMA as the 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. Lord (1996) identified three elements of SMA: collection of competitor information; exploitation of cost reduction opportunities; and matching of accounting emphasis with strategic position.

Moreover, Roslender and Hart (2003) described SMA as a generic approach to accounting for strategic positioning, attempting to integrate insights from management accounting and marketing management within a strategic management framework. Obviously, these definitions of SMA share a number of characteristics. The common theme is that SMA includes one or more of the following dimensions: an external focus, a marketing focus or a long-term orientation.

A number of Management Accounting techniques have been identified as being a part of the SMA framework by management accounting researchers. Cadez and Guilding (2008) grouped these techniques into five basic categories; Costing Techniques, Planning, control and performance measurement Techniques, Strategic decision-making Techniques, Competitor accounting Techniques, and Customer Accounting Techniques. This study looked at SMA from a specific point view particularly, Customer Accounting (CA) because of the little attention paid to CA area in the literature. However, the current study focused on the service sector because such industry normally applying CA techniques more than other industries (Cadez, 2006). This study is based on a survey on listed companies in Jordan. The objective of this study is to

explore the differences in CA information usage across different firms' size in context of Jordan.

2. Literature review and proposition

2.1 The effect of firms' size on CA information usage

Over the past few years, had seen a very slight increase in the number of customer-focused research studies – accounting analyses based on individual customers or customer groups (Guilding & McManus, 2002). Guilding and McManus (2002) assessed CA adoption levels and the background of CA adoption in their studies, which seemed separated from other similar studies. One particular CA technique that had not been extensively discussed was the customer profitability analysis (CPA) (Chenhall, 2003; Foster & Gupta, 1994; Foster & Young, 1997). This technique was considered only in the context of case studies and standard commentaries. More investigation of the CA literature had also uncovered some discussion regarding customer role in the wider matter of the accounting/marketing interface. The current study has conceptualized CA as the level of the use of external accounting information relative to customers, namely the customer profitably analysis (CPA), lifetime customer profitability analysis (LCPA), valuation of customers as assets (VCA), (Guilding & McManus, 2002; McManus & Guilding, 2008).

Ward (1992) viewed CPA, as a very important technique due to the increasing focus on customers as a company's most important assets. He defined CPA as the total sales revenue generated from a customer or customer group less all the incurred costs in servicing that customer or customer group. Ward argued that customer profitability was affected by the changing levels of required customer service and a firm must be able to differentiate its profitable customers from unprofitable ones and those wearing away the firm's profits, thus making CPA an important analytical tool. This customer focus especially on existing profitable customers was directly linked to the marketing strategies of increased product sales to new and existing customers. Ward termed this "a customer asset based strategy". Guilding and McManus (2002) have explored, the second generation of CPA, which is a lifetime customer profitability analysis (LCPA), the LCPA has covered the weakness by CPA and provide information with regards to the whole relationship between customers and the company.

In their recent review of CA potentiality in the hotel industry, Guilding, Kennedy and

McManus (2001) expanded on CPA and customer asset accounting (CAA). The authors outlined a CA approach referred to as "supplementary purchasing CPA". In a hypothetical case study, they stressed on the importance of considering further revenue generating activities such as meals in hotel restaurants, bar sales, telephone calls, room service etc. (referred to as "supplementary") after the initial hotel room sale. The authors suggested dividing a hotel's customer base according to the different purchasing patterns of these supplements. From their analysis of the difference in average total payment from the sale of a room night to each market division, they found several managerial implications relating to pricing, resource allotment, decisions and control. Guilding et al, (2001) also considered the prospects of CAA in the hotel industry. Some probable approaches to VCA were measured, and though the net present value (NPV) approach appeared to be the most appropriate CAA valuation method, alternative approaches (e.g. replacement cost method) might have to be considered in a particular decision-making situation. For example, in a situation when demand for hotel accommodation exceeded supply, the real cost of any booking cancellation is the additional cost incurred in finding a replacement client and not the current value of cash inflows that would have been earned from the cancelling client.

The firm of an organization considers as important attributes that have played a role in the development of contingency theory studies (Otley & Wilkinson, 1988), specifically, in management accounting studies (Otley, 1978; Chenhall, 2000). There appears to be a fairly strong finding that size is positively associated with accounting sophistication (Bruns & Waterhouse, 1975; Merchant, 1981). Considering size also provides an opportunity to appraise whether the positive association between size and accounting sophistication documented in the literature is evident for accounting information systems used in outsourcing decision making and control. Therefore, following are the propositions that have been outlined in this paper:

P1: CA information usage is higher in large companies than small companies.

P1a: CPA usage is higher in large companies than small companies.

P1b: LCPA usage is higher in large companies than small companies

P1c: VCA usage is higher in large companies than small companies.

3. Methodology

3.1 The Sampling Frame

The sample will be all services companies which listed in Amman Stock Exchange (2010). Data was collected using a questionnaire distributed to the companies. The reason behind choosing those of services was because it's expected that services companies applies like these CA techniques (see, Cadez, 2006).

3.2 Variables measurement

3.2.1 Customer Accounting information

One of the limitations of previous studies is that of the CA techniques were measured by a single item (Guilding &McManus, 2002; Cadez, 2006). However, to overcome the potential bias by using one item (McManus &Guilding, 2008) the current study has adopted an instrument to measure the extent of CA information usage by multiple items (Almawali, Zainuddin, & Kader Ali, 2012), where CPA technique was measured by eight items, LCPA was measured by seven items, and five items to measure VCA. Measurement of the extent of usage can be achieved by posting the question: "To what extent do you use the following information for strategic decisions?" this question directly followed by the 20 items listed together with a Likert-scale choice from "1" (Not at All), to "7" (To a greater extent). As shown in Table1 a reliability check for each and overall dimension of CA measures produced Cronbach alpha values all above the lower limits of normal acceptability (Nunnally, 1978).

3.3 Firm size

Concerning firm size measurement, there are several ways of estimating organization size including profits, sales volume, assets and employees (Chenhall, 2003). However, firm size is measured in term of number of employees.

4. Result and discussion

Table 1 provides means, standard deviation, theoretical and the actual range of the three dimensions of CA information. Taking into consideration that the scale used for CA information usage was 1 to 7 (with 4 as the middle point). The table shows that the most used CA information

in the Jordanian companies was customers profitability analysis (mean = 5.02, SD = 1.27), followed by lifetime customer profitability analysis (mean = 4.14, SD = 1.41), Meanwhile, the lowest used information was the valuation of customers as assets which was below the median value (mean = 3.24, SD = 1.53).

Table 1: Descriptive Statistics of CA Usage

	CA dimensions	Mean	*SD*
Customer Accounting Information	Customers profitability analysis	5.02	1.27
	Lifetime customers profitability analysis	4.14	1.41
	Valuation of customers as assets	3.23	1.53

This means that, on average, the Jordanian companies' usage of CA information was above average, except for except for valuation of customers as assets, which was used below average. To see difference in CA information usage between characteristics of the firms, the one-way ANOVA tests were performed on CA information by age of the company, and firm size measured by the number of employees.

Table 2:ANNOVA Test for Differences in CA Information by firms' size

Firm Size		**CPA**			**LCPA**			**VCA**		
		Mean	*SD*	F-value	Mean	*SD*	F-value	Mean	*SD*	F-value
Number of Employees	≥ 200	5.03	1.36	.31	3.42	1.06	1.85*	2.90	1.39	1.1
	201-300	4.84	1.09		3.83	1.52		3.38	1.50	
	301-400	5.00	1.01		4.75	1.28		3.64	1.74	
	401-500	4.92	1.13		5.04	.82		3.85	1.75	
	More than 500	5.25	1.52		5.09	1.31		3.15	1.61	

Note: *$p < .01$, *SD* = Standard Deviation

Table 2 summarizes the results of the one-way ANOVA tests. The table shows that there is only significant differences in lifetime customers profitability analysis usage among the firm size (measured by number of employees) (F-value = 1.85, $p < .01$). The means and F-value indicate that the biggest companies have the highest level of lifetime customers profitability analysis usage, while the smallest companies have the lowest level of lifetime customers

profitability analysis usage therefore, the proposition (P1b) is supported and (P1a & P1c) are not supported. The differences in lifetime customers profitability analysis among companies are presented further in the Figure 1. The table shows no significant differences in customers profitability analysis, and valuation of customer as assets, usage among the various company sizes.

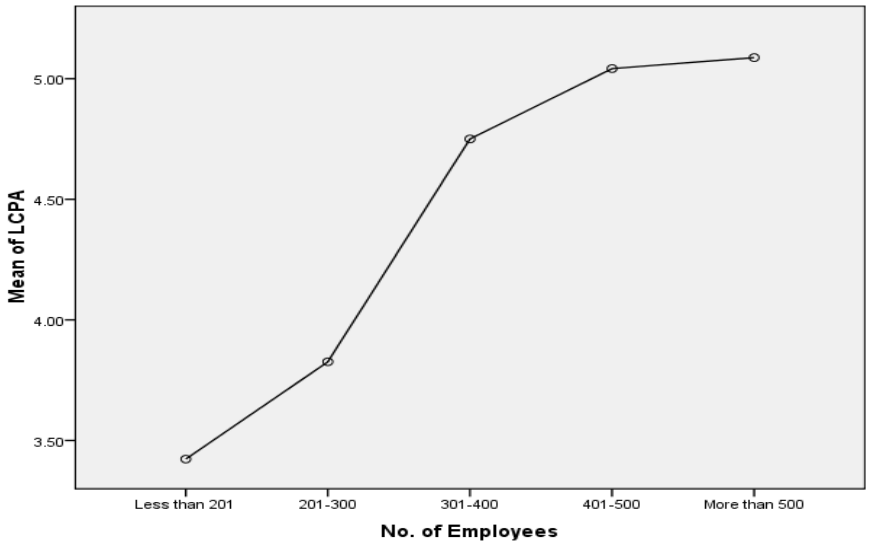

Figure 1. Differences in lifetime customers' profitability analysis among firm size.

As shown in table 2, one CA information dimension (lifetime customer profitability analysis usage) showed significant differences across firm size, evidenced by the significant increases in lifetime customer profitability analysis usage as the number of employees increased. This result implied that large companies, with large numbers of employees, used lifetime customer profitability analysis for strategic decisions more than smaller companies did. Large companies generally have more sophisticated accounting information systems to generate and use high levels of high quality information. This notion was confirmed by Merchant (1981), Bruns and Waterhouse (1975), and Guilding (1999) who argued that company size influenced accounting information system complexity and posited that the larger companies were more able to apply sophisticated accounting systems. (Mashhour & Zaatreh, 2008), who found that financial companies in Jordan were the largest investors in information systems, also supported the current study's explanation. Therefore, it is not surprising to find differences in the levels of lifetime

customer profitability analysis usage, since larger Jordanian companies had more sophisticated information systems.

According to Guilding and McManus (2002) lifetime customer profitability analysis is considered as a second generation, more sophisticated development of customer profitability analysis, and this was reflected in its high level of usage by large Jordanian companies that had sophisticated accounting information systems ((Mashhour & Zaatreh, 2008) to generate lifetime customer profitability analysis information (Guilding, 1999). Lifetime customer profitability analysis is the most complex CA information dimension compared with other CA information dimensions, which are considered less sophisticated information items, but remains as an important CA source for companies of all sizes (Cadez & Guilding, 2008; Cadez, 2006).

5. Conclusion and future research

The purpose of this paper was to explain the differences of CA information usage across different companies' size in Jordan. Based on the statistical analysis (ANOVA), the current study found out that the level of usage of lifetime customer profitability analysis differs based on the firms' size. Therefore, firms' size considered as an important driver for CA information usage, especially, lifetime customer profitability analysis. However, future efforts could be directed to apply the other contingent factors (e.g. Perceived environmental uncertainty and business strategy) because it might affect the level of CA information usage. Future empirical research can also explore the potential antecedents for CA information by applying "selection-contingency framework". In addition, other studies could replicate the current study with different samples in other countries or other sectors.

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