Using Costing Systems in order to Price Products in Small Textile, Leather, and Clothing Companies:
Field Study from Jordan

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Abstract
This study aims to explore and describe the use of cost accounting in textile, leather and clothing companies in Jordan in relation to material cost, labor cost, and indirect cost. The study also examines the impact of using costing systems on the pricing process by distributing a questionnaire to 76 respondents. The study found that such companies suffer a high level of competence which forces them to use costing systems in order to price their products, by taking into account material, labor and indirect costs. The study suggests that good quality and high effective cost accounting systems and modern techniques should be adopted and implemented, such as ABC, and Target Costing. Moreover, companies should also employ qualified cost accountants or train their staff on the use of such systems. In addition, it is highly suggested that more studies should be conducted on textiles, leathers and clothing companies in order to shed light on the managerial accounting systems.

Key Words: Managerial accounting, cost accounting, costing systems, and pricing process.

Introduction
Since Jordan joined the WTO and the entrance of new foreign companies, the level of competition rapidly increased in the market, and certain agreements had to be implied on local companies such as applying certain cost accounting systems in order to help it in the pricing process of its products, gain profit and still stay competitive. In Ajibolade (2010) more sophisticated management accounting systems designs that would provide broader focused costing information are being increasingly advocated, some researchers suggested that the traditional design may still provide benefits to organizations depending on the context of the organization, and as in Al-Rahamneh (2011) using new cost accounting systems in textile, leather and clothing companies rather than the traditional systems really improved the efficiency and competition ability.
Study Problem

Since the pricing method is a strategic decision a company should make in relation to amount of profit the company aims to gain, and the large rate of competition also pushes the company to increase its product type with suitable selling prices. In relation to small textile, leather, and clothing companies cost accounting needs to be implied in order to decrease its prices, stay competitive, and gain profit at the same time. The research problem asked the following: Is there an effect of cost accounting system on the pricing process in small textile, leather and clothing companies in Jordan in relation to raw material costs, labor costs, and indirect costs.

Objective of the Study

The study aims to notify the degree of implementing cost accounting in small textile, leather, and clothing companies in Jordan and its effect on the pricing process, improve product quality, and meanwhile increase its profit.

Theoretical Framework and Previous Studies

Studies of cost accounting that is part of managerial accounting are based on empirical work, others on theoretical speculations that suggested a variety of context, which should fit particular cost accounting system designs. Špičková (2013) described different views of costs and classified basic characteristics of strategic cost calculations in small and medium sized companies, by focusing on the activity based costing, the life cycle costing and the target costing, and as a result the paper agreed with Zongshengs' (2010) study that mentioned “Due to their different characteristics, small and medium sized enterprises have to establish their own financial management strategies instead of copying those of the large enterprises.”

Ajibolade et al. (2010) studied the performance effects of cost accounting as part of the managerial accounting system especially those of developing countries and to provide evidence on influences on companies performance that could assist in efforts to improve the performance of manufacturing companies in Nigeria, and by adopting a survey methodology collected from 144 manufacturing companies, results showed a strong moderating effect of perceived environmental uncertainties that face organizations on the relationship between management accounting design and performance in a positive manner. While Dick-Forde et al. (2007) represented a pilot study that aimed to access and disseminate information for improving the use of management and cost accounting to increase global effectiveness of companies in the Barbados, results showed a lack of a clear defined function management accounting, coupled with the extensive use of management accounting information for costing and pricing decisions , that still need further research.

Activity-based costing (ABC) is a costing method that gained popularity in recent decades, for ABC results can be extended to activity-based management system to assist managers in making decisions that can lead to higher profits (Cooper and Kaplan, 1991), and in Needy et al. (2003) a field study involving the implementation of ABC in three small manufacturing companies showed that small manufacturing companies need reliable and accurate cost information to survive, as well as product diversity, high overhead costs, and skewed customer distribution exist.

Traditional based costing systems are unlikely to deliver accurate cost information to aid with price setting and decision making, for that ABC is a valuable management support tool for small manufacturing companies. While Roztocki et al. (2004) described a procedure that allows companies to easily switch from a traditional costing system to an activity-based costing system that is particularly useful to small companies for which the standard implementation of ABC is too expensive and complex.
Study Hypotheses

Main Hypothesis

There is no significant relationship between the cost accounting system and the pricing process in relation to material cost, labor cost, and indirect costs. And by studying the variables the following sub-hypotheses appeared:

a. First sub-hypothesis: There is no effect of raw material costing on the pricing process in small textile, leather and clothing companies in Jordan.

b. Second sub-hypothesis: There is no effect of labor costing on the pricing process in small textile, leather and clothing companies in Jordan.

c. Third sub-hypothesis: There is no effect of indirect costing on the pricing process in small textile, leather and clothing companies in Jordan.

Research Methodology

Measuring Instrument

The research was carried out by primary data, collected by using a structured questionnaire, carried from a combination of Jahmani and Al-Omari (2003), and Hijazi and Ma’alem (2012) studies that were implied on other sectors, and the data was analyzed by using SPSS software. The first part of the questionnaire contained the demographic factors which were education, working position, experience, selling market, number of workers, and number of products produced. While the second part measured the relationship between the effect of cost accounting system on pricing process in textile, leather and clothing companies in Jordan.

The scale of measuring was Likert type (five-point scale), and answers were ranged between highly agree, agree, somewhat agree, disagree, and highly disagree.

The reliability test was applied to examine the internal consistency of the research instrument. The Cronbach’s alpha coefficient was (.81) which confirms the reliability of the questionnaire.

Research Population and Sample

Accountants in different small textiles, leathers and clothing companies in Jordan were the target population of the study, chosen randomly, for the questionnaire was administered to accountants, and 76 questionnaires were valid for analysis from 90 questionnaires distributed, with a rate of return of 84.4%.

Methods of Data Analysis

The descriptive and analytical statistical techniques were applied in the analysis by using mean, standard deviation, percentage and frequency. Also t-test was applied to test the study hypotheses.

Results of the Study and Hypotheses Testing

Descriptive Statistic Results

Table 1 shows the distribution of the sample according to their education, working position, experience, selling market, number of workers, and number of products produced. The table illustrates that 36.8% of the respondents hold a bachelors’ degree in accounting, and 63.2% of the respondents were financial accountants. While 78.9% have a working experience of more than 10 years, and most of the selling markets were compound markets with the rate of 68.4%. Since the study sample was of small companies
the number of workers between 10-20 workers had the highest percentage, while the number of products produced were the highest at a rate of 78.9% for less than 5 products. In general, the previous results suggest that respondents are able to absorb the questionnaire and provide reliable information.

Table (1) Descriptive statistics (Demographic Factors)

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Type of independent variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>High school</td>
<td>20</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>8</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>Bachelors</td>
<td>28</td>
<td>36.8%</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>12</td>
<td>15.8%</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>8</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>100%</td>
</tr>
<tr>
<td>Working position</td>
<td>Head officer</td>
<td>20</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>Financial accountant</td>
<td>48</td>
<td>63.2%</td>
</tr>
<tr>
<td></td>
<td>Company manager</td>
<td>8</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>100%</td>
</tr>
<tr>
<td>Experience</td>
<td>Less than 5 years</td>
<td>16</td>
<td>21.1%</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>More than 10</td>
<td>60</td>
<td>78.9%</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>76</td>
<td>100%</td>
</tr>
<tr>
<td>Markets</td>
<td>local</td>
<td>20</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>Foreign</td>
<td>4</td>
<td>5.3%</td>
</tr>
<tr>
<td></td>
<td>Compound</td>
<td>52</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>100%</td>
</tr>
<tr>
<td>Number of workers</td>
<td>Less than 10</td>
<td>24</td>
<td>31.6%</td>
</tr>
<tr>
<td></td>
<td>10-20</td>
<td>32</td>
<td>42.1%</td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>8</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>4</td>
<td>5.3%</td>
</tr>
<tr>
<td></td>
<td>More than 40</td>
<td>8</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>100%</td>
</tr>
<tr>
<td>Number of products</td>
<td>Less than 5</td>
<td>60</td>
<td>78.9%</td>
</tr>
<tr>
<td></td>
<td>5-10</td>
<td>4</td>
<td>5.3%</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>4</td>
<td>5.3%</td>
</tr>
<tr>
<td></td>
<td>More than 15</td>
<td>8</td>
<td>10.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2 used both the mean and standard deviation to show the degree of effect of the cost accounting system on the pricing process in textile, leather and clothing companies in Jordan, which was relatively high in total, especially in relation to labor cost, while moderate in relation to material and indirect cost.

Table 2. Descriptive statistics (mean and standard deviation)

<table>
<thead>
<tr>
<th>Type of variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Materiality</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost</td>
<td>3.8316</td>
<td>.27264</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>Material cost</td>
<td>3.1579</td>
<td>.88876</td>
<td>4</td>
<td>Moderate</td>
</tr>
<tr>
<td>Labor cost</td>
<td>4.0351</td>
<td>.73667</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>Indirect cost</td>
<td>3.3684</td>
<td>.57677</td>
<td>3</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
Hypotheses Testing

Table 3. Testing hypotheses based on the use of t-test.

<table>
<thead>
<tr>
<th>Significance of hypotheses</th>
<th>Material cost</th>
<th>Labor cost</th>
<th>Indirect cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costing significance</td>
<td>0.0*</td>
<td>0.0*</td>
<td>0.0*</td>
</tr>
</tbody>
</table>

Note: * significant at a level of 0.01

Table 3 illustrates that the value of calculated (t) for the first main hypothesis (H₁) and all the sub-hypotheses with the significance level of (0.00) were higher than the tabulated (t) value (α = 0.01). So the first hypothesis is rejected as well as all the sub-hypotheses, which states that “There is no significant relationship between the cost accounting system and the pricing process in relation to material, labor, and indirect costs.”

Results also showed that 76.6% of the companies use the cost accounting system in order to price their products. For 70.4% revealed that they used a cost accounting system in relation to material, labor, and indirect costs, even though none of the respondents was a cost accountant. While they all agreed that the main problem in the internal market was the lack of raw material.

Conclusions and Recommendations

The objective of this study was to determine the relationship between the cost accounting system and the pricing process in small textile, leather and clothing companies in Jordan by using material, labor, and indirect costs as independent variables of measurement.

Results indicated that there was a relationship between the cost accounting system and the pricing process in small textiles, leathers and clothing companies in Jordan in relation to the independent variables.

Since such companies work in a competitive market they should look for anything new that may help the company stay in such a market, and that they should pay more attention on the internal market, and if the type of accountant in the company may affect the job improvements or not, and whether the implementing of ABC system may positively affect such group of companies.

References


Špičková, M., (2013). The Use of Cost Management Techniques as a Strategic Weapon in SME’S. Scientific Papers of the University of Pardubice, Series D, Faculty of Economics & Administration, 20(28), 122-133.