

# The Extent of Applying Strategic Management Accounting Tools in Jordanian Banks

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## Abstract

The study aims to know the extent of applying strategic management accounting tools in Jordanian banks. The tools that this study tested are; Activity Based Costing, Benchmarking, Competitor Analysis, Valuing Customers, Integrated Performance Measurement, Life Cycle Costing, Cost of Quality, Brand Value Monitoring, Managing and Budgeting, Strategic Pricing, Target Costing, Value Chain Costing and Balanced Scorecard.

To analyze the responses of the respondents (employees) in these banks, and the effect of the employees' demographic characteristics on perceiving the importance of applying these tools of decision making, the researcher used descriptive and analytical statistics, such as one sample T-test and one way ANOVA.

In this study the researcher has found that Jordanian banks use traditional management accounting; they don't use strategic management accounting and its tools.

It is recommended that Jordanian banks train their employees in using strategic management accounting tools, that are based on the findings of this study to improve overall strategic performance.

**Keywords:** strategic management accounting, strategic management accounting tools

## 1. Introduction

Jordan has become a member in the Global Trading Organization; this generates many challenges for Jordanian companies and pushes them to apply all techniques to face the rigorous competition, especially when management accounting (or managerial accounting) has become insufficient to reduce costs, improve the strategic and competitive position of the company in a global market and search to sustain customers' loyalty to its products or services. To achieve that, management must concentrate on creating new proactive accountants and managers who have the ability to analyze the internal environment, discover the strength points to reinforce them and discover the weakness points to manipulate them. In addition to that, they also analyze the external environment in order to discover the opportunities to benefit from them, and discover the threats to avoid them. This requires that management must use the strategic management accounting tools (SMAT) that help management in making a survey of all factors in the internal and external environment that affect the plans, control procedures and measuring performance. There are many companies in Jordan that spend little amounts on research and development as well as in training programs, because their managers believe that there are no benefits from the investment in these areas. They search for maximizing profits only to get the complacency of stockholder, and to continue in their jobs for long periods.

## 2. Literature Review

Strategic management accounting (SMA) is extending management accounting (MA). "It is a development in accounting that acts as a framework for various strategic elements" (Holloway 2006). MA provides detailed information to internal users within the enterprise. But, it doesn't trace the changes which follow the big changes in the business' environment, so that, the need for entering new tools that links MA with company's strategies which is called SMA. The development in the field of SMA focuses on the internal financial information and on the external aspects of the business operation. The importance of SMA comes from its role in measuring the aspects of performance (Fowzia, 2011). Uyar (2010) found in his study on Turkish manufacturing companies that their managers' perceive in using traditional accounting tool is still important, also Rehman (2011) find the same thing when he studied a sample of Pakistan's manufacturing companies.

Most definitions of SMA focus on competitive and marketing strategies. SMA or SMA's tools have not been adopted widely and the term SMA wasn't widely understood or used (Cadez & Guilding 2008). SMA has remained just a collection of academic texts and has had insignificant impact on managerial theory and practice (Seal, 2010). Whereas, Bhimani & Bromwich (2010) found in their study that there is a wide application of management accounting tools within organization and the low recognition of the SMA.

SMA is the future of management, its functions cover the collecting of information about the competitors, reducing the costs and gaining competitive advantages (Shah et al. 2011).

Authors and researchers failed to put an inclusive definition of SMA. They focus in its elements and tools. They interested in the application its tools, such as: strategic costing, customer analyses, target costing, and so on.

Nixon & Burns (2012) believe that SMA consists of strategic management literature, practice, strategy – oriented literature and management accounting tools, so that future researches must expand their focus on developing of interactions among the four preceding elements which build the framework of SMA.

Alkhadash & Feridun (2006) investigated the link between the practice of ABC, JIT and TOM as a strategic initiatives and the improvement in financial performance of 56 industrial shareholding companies in Jordan and they found also, that 26.8 % of the these companies use at least one of the strategic initiatives and the awareness level of the importance of using the strategic initiatives is to be significantly high among financial managers.

Implementing SMA helps management to overcome the hard competition (El-Dyasty, 2007).

SMA and MA offer similar functions at an operational level. However SMA tries to develop the ideas of MA and refines them. It uses financial and nonfinancial information (Sami, 2011).

Cinquini & Tenucci (2010) found in their study that linking strategy orientation and SMA tools has a limited significance, but there was an empirically support of the relationship between costing techniques of SMA (activity based costing, life cycle costing, quality costing, target costing and value chain analysis) and the strategy, the evidence which is stated in the study suggests that “defenders” make greater use of costing techniques.

Sucu (2010) tested the applications of strategic management tools in 55 medium sized Turkish enterprises; he found that SMT is not known by medium sized enterprises. The most common tools which are used; benefit-cost analysis, risk analysis, total quality management and portfolio analysis.

Erbasi and Ünüvar (2012) tested the levels of using strategic management tools (SMT) and satisfaction with them in 53 five-star hotels in Turkey. They found that the levels of using SMT were high, but satisfactions with them were low. The tool which is highly used is the customer relationship management. The tool which has the highest satisfaction scores is the SWOT analysis. They also found that there is no significant difference between satisfaction levels of strategic management tools and demographic variables.

Ramljak and Rogošić (2012) found in their study that SMT implementation has a positive impact on cost control and cost reduction, depending on a questionnaire survey of the large-sized Croatian companies. Hoffjan and Wompener (2006), “found after surveying 20 general management accounting text books that SMA is not integrated into text books within a coherent, consistent framework”. Ahmad and Roghayeh (2010) found in their study that managers of the listed companies in Tehran stock exchange used the traditional management tools. Soljakova (2012) found the main reasons for the non widespread of applying SMA is because of there is no agreement between writers about SMA definition, unclear methods and the un efficient managers to apply it or its tools. Also, Gary et al (2003) found in his study that 76% of the companies in his study use quantitative techniques (spread sheet), 70% of them use operation budgeted and direct labor to allocate over head costs, and 25% use target costing.

The study based on twelve tools from the tools that researchers in the SMA used in their study. The tools that study will test them are; Activity Based Costing, Benchmarking, Competitor analysis, Valuing customers as an assets, Integrated performance Measurement , Life Cycle Costing, Cost of Quality, Brand value monitoring, managing and budgeting, Strategic Pricing, Target Costing, Value Chain Costing, Balanced scorecard.

Langfield-Smith (2008) said that a range of techniques have been included under SMA.

In order to make strategic decisions and monitor strategic programs it is necessary to use SMA tools that can be classified as below:

### *2.1 Activity Based Costing (ABC)*

ABC is a costing system allocates factory overhead costs to production activities. Those activities are considered

the ultimate causes of indirect costs (Cinquini & Tenucci, 2010).

Jasch (2003) indicated to the benefits of activity based costing implementing in monitoring environmental costs. Hardan & Shatnawi (2013) found in their study that there is a positive relationship between applying the ABC and the telecom companies' financial performance. This study agreed with the study of Fowzia (2011) that surveyed the empirical studies in Bangladesh and found that only activity based costing, target costing and strategic costing techniques are significant to achieve strategic effectiveness.

### *2.2 Benchmarking*

Benchmarking is the process of identifying, understanding and adapting outstanding practices from organizations anywhere, to help the enterprise in improving its performance (Kumar & Dhakar 2006), by comparing the company's performance to an ideal standard. Using benchmarking increases competitive advantage, profitability and achieves continuous significant improvement in customer satisfaction (Magd 2008, Lee & Soh 2006).

Kadash and Al Ahomari (2013) found in their study that the practice of performance benchmarking in private firms in Saudi Arabia was better than public organizations and there was no significant difference between companies based on their sizes. Maire et al., (2005) also found that benchmarking was so popular in French companies, 50 percent of 1000 companies used benchmarking regularly and 80 percent of them suggested that benchmarking is an effective tool of change.

### *2.3 Competitor Analysis*

Company must do competitor analysis to understand his reaction towards its products' prices, products quality, the share market and the services after sale. This analysis will rationalize the related decisions. Competitor analysis requires collecting information for the competitor, such as sales trends, market share, volume, unit cost (Lino et al., 2005), by using direct observation for common suppliers and customers (Horngren et al., 2012).

### *2.4 Valuing Customers as an Assets*

Customer accounting means estimating sales, costs, profits which are derived from customers. This tool is sometimes referred to as "customer account profitability".

Firms should Apply SMA depends on restating firm boundaries, reallocating resources, reengineering process, and re evaluating products or services in relation to customer requirements (Anderson and Dekker 2009).

### *2.5 Integrated Performance Measurement (IPM)*

Company should achieve the integration between its strategy and the operational goals, to do that it should track the customer's satisfaction, competitive advantage, and define non-financial measures. In practice, IPM may be used to plan, formulate strategy and to support implementation (Nixon et al, 2011).

### *2.6 Life Cycle Costing (LCC)*

LCC requires including all the costs incurred as a part of the product costs along its life. LCC tests the relation ship between the customer payment for the product and the total cost that he incurred to acquire it (Shank, Govindarajan 2012 and Steen 2005).

### *2.7 Cost of Quality (COQ)*

COQ means computing and controlling the costs of achieving high quality product that satisfy the customer and maintaining the share in the market.

### *2.8 Brand Value Monitoring, Managing and Budgeting*

"Brand is a combination of different features which are associated with a product to give it a unique identification" (Rao et al., 2001).

Brand value can be used as a basis for managerial decisions on allocation of resources to support a brand position. This concept links accounting information with brand improvement and customer loyalty.

Ranjbarian et al., (2012) found in their study that the perceived quality has a strongly influence on brand, customer satisfaction, and Re-purchase the product to service.

### *2.9 Strategic Pricing (SP)*

Strategic pricing means the analysis of strategic factors that affect the pricing decision process. These factors include: competitor price, reaction, elasticity, market growth, economies of scale, and experience.

### 2.10 Target Costing (TC)

TC is a tool of reducing the product costs over its life cycle. It is the maximum amount of cost that can be incurred on manufacturing product and with maintaining to earn the intended gross profit from the product or the service.

Implementing TCs' tool requires defining the product, setting the product price and achieving competitive costs. To compete effectively, company must redesign its products in order to shorten product life cycle, because Planning, developing and designing product stages are a critical in managing product costs. TC studies ignored investment evaluating the new product design (Moll and Leary 2012). Al-Dalabeeh (2012) found in his study that Jordanian industrial companies have the ability to apply target costing system as a method of reducing cost, but there are many constraints prevent that.

Swenson et al. (2003) found in their study that the leading five companies in USA that applied target costing in managing costs were Chrysler Group, Continental Teves, Caterpillar, Daimler and Boeing, also Borgerams and Fridh (2003) found in their study that 16.5% of the Swedish companies apply target costing. Wood et al, (2012) found that the combination of target costing with other tools of SMA can connect strategy formulation with strategy execution and profit generation.

### 2.11 Value Chain Costing (VCC)

VCC's tool depends on allocating costs to the activities required; designing, producing, marketing, distributing, and the providing service after sale. VCC tool is developed from value chain analysis that added value to products or services (Kirli and Gumus, 2011).

Using VCC tool helps company in assessing, developing strategic position; evaluate competitive cost position, reducing time, and costs (Yang and Shang 2007). This will give management the powerful analysis tool of strategic planning (Xue, 2005).

The value chain concept is divided in to two main strategies; lower cost strategy and differentiation strategy. The low cost strategy is to achieve the lowest cost comparative to competitors while the differentiation strategy aims to create some thing that customers perceive as being unique (Shrank and Govindarajan 2012). Assigning operating costs and assets to each activity in the chain value helps on cost estimating. The combined costs of all activities in the chain define the cost structure of the company (Thompson et al. 2005).

### 2.12 Balanced Scorecard (BSC)

BSC framework links the perspectives of stakeholders, investors, employees, and customers with the organization's mission, vision, performance measure, strategic plan and resources. To succeed; an organization must add value for the preceding groups in the short and long run. BSC assumes that an organization will get only what is measured, so that an organization will determine each group's objectives and translate them into performance measures that have specific, quantifiable performance targets (Needles, 2000). Wiersma (2009) found in his study on 19 Dutch firms that managers use BSC for decision- making, coordination and self monitoring.

The Balanced Scorecard approach attempts to provide a clear prescription as to what organizations should measure.

Rompho, Nopadol (2011) the cause for failure of the implementation of Balanced Scorecard in SME is the frequent strategy changes.

## 3. The Problem of the Study

This study aims to answer the following questions:

Are the Jordanian banks applying SMA's tools (see table 1).

Table 1. The questions and phrases

The study's questions	The phrases that measure these questions in the questionnaire
(1) Are Jordanian banks applying Activity Based Costing tool?	(1-2)
(2) Are Jordanian banks applying Benchmarking tool?	(3-6)
(3) Are Jordanian banks applying Competitor analysis tool?	(7-10)
(4) Are Jordanian banks applying Customer Accounting tool?	(11-12)
(5) Are Jordanian banks applying Integrated performance Measurement tool?	(13- 16)
(6) Are Jordanian banks applying Life Cycle Costing tool?	(17-18)
(7) Are Jordanian banks applying Quality Costing tool?	(19 – 20)
(8) Are Jordanian banks applying Brand value monitoring, managing and budgeting tool?	(21 – 24)
(9) Are Jordanian banks applying Strategic Pricing tool?	(25-29)
(10) Are Jordanian banks applying Target Costing tool?	(30)
(11) Are Jordanian banks applying Value Chain Costing tool?	(31 – 33)
(12) Are Jordanian banks applying Balanced scorecard tool?	(34-38)

Is there any significant effect of demographic characteristics of the respondent on perceiving the importance of applying SMA's tools?

#### 4. The Study Objectives

The study aims to sustain the following objectives:

Knowing the extent of applying Jordanian banks SMA's tools.

Knowing if there is any significant effect of demographic characteristics of the responsible members on these banks on perceiving the importance of applying SMA's tools.

#### 5. The Study Hypotheses

The study aims to test the following hypotheses:

H1: Jordanian Banks apply SMA's tools.

H2: There is a significant effect of demographic characteristics of the responsible members on perceiving the importance of applying SMA's tools in Jordanian banks.

#### 6. Study Methodology

##### 6.1 Scope

The study is based on a descriptive approach, by surveying the preceding studies and researches which are similar. The study also depends on analytical approach by developing a questionnaire to answer the questions of the study, and testing the study's hypotheses.

##### 6.2 The Population of the Study

The population of the study consists of the (30) employees in Jordanian Banks, Researcher distributes (30) questionnaires; he received only (24) from them. He found only (20) of these questionnaires are correct, these represents (66.7 %) of the distributed questionnaires.

##### 6.3 The Study's Tool

The questionnaire consists of two parts; part (a) consists of phrases measures the personal demographic characteristics of the respondents, and part (b) consists of (39) phrases. Table number (1) appears the study's questions and the phrases that measure these questions. Five lickert scales has been used to determine the weights of the phrases, the weights as following: strongly agree, agree, neutral, disagree, and strongly disagree and the reliability of the questionnaire depending on Cronbach's Alpha was (0.8811).

##### 6.4 Statistical Methods

The following statistical methods have been used in this study:

Measure descriptive statistics based on the statistical packages (SPSS) to describe the characteristics of the sample of study.

One sample T- Test to compare the averages calculated with the tabulated average applied in this study.

One – Way ANOVA to test to identify the significance difference on the perception of the respondents of the importance of applying SMA tools, which are attributed to the variables of demographics characteristics (age, Job, educational level, specialty).

## 7. Results and Discussions

### 7.1 Sample Characteristics

The table 1 shows that (45%) of the respondents are managers, 5% of them studied management or accounting. This means that 95% of them haven't any knowledge in management accounting or cost accounting and the strategic management accounting tools, so that banks must enter its managers and employees in training programs on applying the tools of strategic management accounting, to help them in the process of decision making.

Table 2. Demographics variables

Description		Frequency	Percentage
Age	20 – 30	2	10 %
	31-40	10	50 %
	Larger than 40	8	40 %
Job	Manager	9	45%
	Accountant	7	35 %
	Internal Auditor	4	20 %
Educational level	Under graduate	8	40 %
	Graduate	5	20 %
	High Graduate	7	35 %
Specialty	Management	5	25 %
	Accounting	6	30 %
	Finance and banking science	5	25%
	Economic	3	15 %
	Others	1	5 %

### 7.2 Analysis Study's Questions

To answer the study's questions, researcher computed the medium and standard deviation for the answers of the respondents.

#### Question (1): Are Jordanian banks applying SMA Tools?

To test the extent of applying SMA tools in Jordanian banks, researcher computed medium, standard deviation of the respondents' answers that measures every tool (see tables 3- 14) then computed the general average of the answers related to every tool, then he computed the weight average for all averages by using one sample t- test.

Table 3 appears that the average of the questions that measure the ABC tool equals (2.050) which is less than the normal average 3, this means that Jordanian banks don't apply this tool.

Table 3. One sample t-test

The questions that measured ABC tool	Medium	Std. Deviation	T Value	Sig.
(1) We allocate factory overhead costs to production activities.	2.150	1.0894	-3.489	0.002
(2) We allocate the activity costs to products that require those activities.	1.950	0.8256	-5.688	0.000
The Average	2.050	0.7931	- 5.357	0.000

Table 4 appears that the average of the questions that measure the benchmarking tool equals (2.088) which is less than the normal average 3, this means that Jordanian banks don't apply this tool.

Table 4. One sample t-test

The questions that measured benchmarking tool	Medium	Std. Deviation	T Value	Sig.
(3) We identify the outstanding practices from organizations anywhere.	2.000	0.795	-5.627	0.000
(4) We try to understand the outstanding practices from organizations anywhere.	2.150	1.040	-3.655	0.002
(5) We adapt the outstanding practices from organizations anywhere.	2.050	0.887	-4.790	0.000
(6) We compare the company's performance to an ideal standard.	2.150	0.875	-4.344	0.000
The Average	2.088	0.5447	-7.955	0.000

Table 5 appears that the average of the questions that measure the competitor analysis tool equals (2.050) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 5. One sample t-test

The questions that measured competitor analysis	Medium	Std. Deviation	T Value	Sig.
(7) We analyze the competitor's reaction to our products' prices.	2.050	0.887	-4.790	0.000
(8) We analyze the competitor's reaction to our products' Quality.	2.050	1.050	-4.046	0.001
(9) We analyze the competitor's reaction to our share in the market.	2.200	0.894	-4.000	0.001
(10) We analyze the competitor's reaction to our services after sale.	1.900	0.852	-5.772	0.000
The Average	2.050	0.7691	-5.670	0.000

Table 6 appears that the average of the questions that measure the customer accounting tool equals (2.050) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 6. One sample t-test

The questions that measured customer accounting	Medium	Std. Deviation	T Value	Sig.
(11) We appraise our sales to every customer.	2.150	0.988	-3.847	0.001
(12) We appraise our profits which are derived from customer.	1.950	0.686	-6.842	0.000
The Average	2.050	0.968	-4.158	0.000

Table 7 appears that the average of the questions that measure the integrated performance measurement tool equals (2.000) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 7. One sample t-test

The questions that measure Integrated performance Measurement.	Medium	Std. Deviation	T Value	Sig.
(13) We try to the integration between long-term strategy and operational goals.	2.000	0.795	-5.627	0.000
(14) We monitor the factors of customer satisfaction.	2.050	0.945	-4.498	0.000
(15) We monitor the factors of customer competitive advantage.	2.000	0.858	-5.210	0.000
(16) We encompassing non-financial measures.	1.950	0.945	-4.972	0.000
The Average	2.000	0.795	-5.627	0.000

Table 8 appears that the average of the questions that measure the cost of life cycle tool equals (2.100) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 8. One sample t-test

The questions that measure The cost of life cycle.	Medium	Std. Deviation	T Value	Sig.
(17) We aggregate all costs incurred as apart of product cost.	2.1500	0.988	-3.847	0.001
(18) We test the relationship between the customer's payments for the product and the total costs.	2.050	0.9987	-4.254	0.000
The Average	2.100	0.945	- 4.498	0.000

Table 9 appears that the average of the questions that measure the cost of quality tool equals (2.050) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 9. One sample t-test

The questions that measure cost of quality.	Medium	Std. Deviation	T Value	Sig.
(19) We identify the costs of creation, repairing and preventing defects to direct management attention to quality problems.	1.850	0.813	-6.328	0.000
(20) We control the costs of creation, repairing and preventing defects to direct management attention to quality problems.	2.250	0.851	-3.943	0.001
The Average	2.050	0.858	- 5.210	0.000

Table 10 appears that the average of the questions that measure the Brand monitoring, managing and budgeting tool equals (2.133) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 10. One sample t-test

The questions that measure brand value monitoring, managing and budgeting.	Medium	Std. Deviation	T Value	Sig.
(21) We use brand value as a basis for managerial decisions on allocation of resources to support a brand position, thus placing attention on management dialogue on brand issues.	2.250	1.020	-3.290	0.004
(22) We do the financial evaluation of a brand through the assessment of brand strength factors such as: leadership, stability, market, internationality, trend, support, and protection.	1.850	0.933	-5.510	0.000
(23) We link accounting information with brand improvement.	2.200	0.768	-4.660	0.000
(24) We link accounting information with customer loyalty.	2.150	0.933	-4.073	0.001
The Average	2.113	0.826	- 5.146	0.001

Table 11 appears that the average of the questions that measure the strategic pricing tool equals (2.100) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 11. One sample t-test

The questions that measure strategic pricing.	Medium	Std. Deviation	T Value	Sig.
(25) We analyze the affect of competitor prices on pricing decision process.	1.950	0.887	-5.294	0.000
(26) We analyze the affect of competitor reaction on pricing decision process.	2.250	1.0700	-3.135	0.005
(27) We analyze the affect of competitor elasticity on pricing decision process.	2.000	0.918	-4.873	0.000
(28) We analyze the affect of market growth on pricing decision process.	2.150	0.813	-4.677	0.000
(29) We analyze the affect of economic of scale on pricing decision process.	2.000	0.973	-4.595	0.000
The Average	2.100	0.926	- 4.346	0.000

Table 12 appears that the average of the respondents on the question that measures the target cost tool equals (2.020) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 12. One sample t-test

The question that measures target cost tool.	Medium	Std. Deviation	T Value	Sig.
(30) We try to reduce the product cost over its life cycle.	2.020	0.456	- 9.318	0.000

Table 13 appears that the average of the questions that measure the value chain cost tool equals (2.100) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 13. One sample t-test

The questions that measure Value Chain Cost.	Medium	Std. Deviation	T Value	Sig.
(31) We allocate costs to the designing activity.	2.150	0.988	-3.847	0.001
(32) We allocate costs to the producing activity.	2.050	0.945	-4.498	0.000
(33) We allocate costs to the marketing and distributing activities.	2.100	1.071	-3.758	0.001
The Average	2.100	0.973	-4.595	0.000

Table 14 appears that the average of the questions that measure the balanced scorecard tool equals (2.020) which is less than the normal average 3, this means that Jordanian banks don't use this tool.

Table 14. One sample t-test

The questions that measure Balanced scorecard.	Medium	Std. Deviation	T Value	Sig.
(34) We financial and non-financial measures for strategic performance management.	1.900	0.852	-5.772	0.000
(35) We link vision and strategy with customer' perspectives.	2.000	0.858	-5.210	0.000
(36) We link vision and strategy with internal business process.	2.150	0.875	-4.344	0.000
(37) We link vision and strategy with learning.	1.850	0.745	-6.902	0.000
(38) We link vision and strategy with growth and financial position.	2.200	0.696	-5.141	0.000
The Average	2.020	0.545	-7.594	0.000

Table 15 appears that the weighted average of the questions of the questionnaire equals (2.035) which is less than the normal average 3, this means that Jordanian banks don't apply SMA tools

Table 15. One sample t-test

The questions that measure all tools	Medium	Std. Deviation	T Value	Sig.
The weighted average for all tools	2.035	0.431	-9.763	0.000

### Questions (2) Is there any significant effect of the respondents' demographic characteristics on perceiving the importance of applying SMA's tools in Jordanian banks?

To answer this question, researcher use One-Way ANOVA test, as in table 4. The table shows that there no significant effect of the respondents' demographic characteristics on perceiving the importance of applying SMA's tools in Jordanian banks.

Table 16. One-Way ANOVA test

Demographic variables	Sum of Square	Mean Square	Freedom degrees	F calculated	F Tabulated	Sig.
Age	0.760	0.382	(2,17)	1.195	3.59	0.327
Job	0.686	0.343	(2,17)	1.058	3.59	0.369
Educational Level	0.217	0.108	(2,17)	0.308	3.59	0.739
Specialty	1.025	0.256	(4,15)	0.743	2.90	0.578

## 8. Testing the Hypothesis

H1: Jordanian banks apply SMA Tools.

From the table 15, the absolute average of computed T value (9.763) is large than the tabulated T value (1.725), for the questions that measures this hypothesis, so that the hypothesis is rejected at the 0.05 level of significance, and freedom degrees (19), this means that Jordanian Banks don't use SMA tools.

H2: There is a significant effect of demographic characteristics of the respondents on perceiving the importance of applying SMA's tools.

To test this hypothesis, researcher use One-Way ANOVA test, as in table 16. The table shows that computed F is larger than tabulated F, so that this hypothesis is rejected. This means that there no significant effect of the respondents' demographic characteristics on perceiving the importance of applying SMA's tools in Jordanian banks.

## 9. Conclusions

This study is the first one in Jordan that investigated the applying of more than one tool of SMA' tools, so that the researcher believes that his study will encourage the research in this area.

The findings of the study are; the Jordanian banks don't apply SMA's tools and there is no effect of the employees' demography characteristic on perceiving the importance of applying the SMA's tools. These results disagree with the results of the studies of Langfield-Smith (2008), Cadez & Guilding (2008), Bhimani & Bromwich (2010), Sucu (2010), Erbası & Ünüvar (2012), Hardan & Shatnawi (2013), Fowzia (2011), Kadasah & Al Ahmari (2013), Maire, et al., (2005), Anderson & Dekker (2009) and Swenson et al. (2003), the preceding studies indicated that there is applying of one tool or more of the SMA tools, but it agrees with the studies of Seal (2010), Uyar (2010), Rehman (2011), Ahmad & Roghayeh (2008) & Al-Dalabeeh (2012) who found in his study that Jordanian industrial companies have the ability to apply target costing system as a method of reducing cost, but there are many constraints prevent that.

## Recommendations

The study recommends that Jordanian banks should apply SMA's tools, and join their employees in training programs in applying these tools.

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