

The Diffusion of Management Accounting Practices in Iranian Manufacturing Companies

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Abstract: The main focus of the current study is on identifying relative adoption and benefits derived from both traditional and new-developed management accounting technique in Iranian manufacturing firms. This study employs the cultural approach, using Hofstede's four cultural dimensions of a country for hypotheses development. A postal questionnaire survey was implemented to collect data from manufacturing firms listed in Tehran Stock Exchange (TSE). The findings indicate that the adoption rates of traditional management accounting techniques are very higher than new-developed techniques in Iranian firms. Also, they believe that the benefits derived from traditional practices are very higher than new-developed practices which this is in accordance with high environmental uncertainty and unstable economy of Iran. However, results also indicate that Iranian firms have obtained satisfactory benefit from some new-developed practices which shows that they are realizing the benefits and are starting to implement more of these new practices in the future.

Key words: Diffusion of Management Accounting Practices • Hofstede Four Cultural Dimensions
• Iranian Manufacturing Firms • Benefits Derived from Management Accounting

INTRODUCTION

Over the past years, the world economy has experienced unexpected changes from the dynamics of competition, the globalization of markets, the evolution of stocks, to the technological advances in the field of information and communications [1]. Due to these changes, corporate managers are working in a more and more complicated environment [2]. In this condition, firms find themselves obligated to redefine the fundamentals of their business and consequently to search for solutions that will allow them to endure and grow [1]. For successfully managing in this situation, managers require to implement a sophisticated information system that supplies them with adequate and essential business information. Management accounting is a kind of system that can supports managers to access and use necessary management accounting practices to achieve firms objectives and consequently improve their performance [3].

Furthermore, the environmental factors for business in a developing country are different from that in advances countries relating to market competition, access to manufactured inputs, human resources,

infrastructure, governmental rules and laws [4]. Especially, Iran which is categorized as developing, provides an interesting cultural contrast to western countries because of emphasise on Islamic laws and values after its revolution in 1979 [5]. The economy of Iran is a mixed (in which both the private sector and state direct the economy) and transition economy (which is changing from a centrally planned economy to a free market) with a large public sector. Some fifty percent of the economy is centrally planned and dominated by oil and gas production, although over 40 industries are directly involved in the Tehran Stock Exchange. Therefore, some scholars state that directly employing new management accounting theories emerged in a foreign context to adopt with an uncertain environment such as Iran is not completely acceptable [6-9].

Generally, there is a lack of knowledge regarding the current status of management accounting practices in Iranian firms. It is argued that due to cultural reasons, Iranian manufacturing firms are slow in adopting the new-developed management accounting practices and instead rely on traditional practices. There is no evidence in relation to the current adopted management accounting techniques in Iran. This study aims to analyze

and identify relative adoption rates and benefits derived from different management accounting technique by manufacturing firms after hypothesising which practices will be highly adoptive according to cultural characteristics of Iran.

Review of Literature: The diffusion of management accounting practices in organizations is an important point of discussion for management researcher and experts. In the last three decades, many of studies in developed countries explore and emphasise the attention on the causes affecting the diffusion of contemporary management accounting practices (MAPs) in companies [10-14]. However, results of these studies are very different.

Many studies investigated the effects of different factors on the extent of usage of management accounting practices and the benefit obtained from using these practices. Some scholars have found a positive correlation between the diffusion of management accounting and internal firm characteristics, such as strategy [15], size, operational complexity, technology, organizational structure, or internal culture [16]. Other researchers highlight that the main variables refer to environmental factors, such as national culture [17, 18] or industry features [19-22]. In addition, some scholar argued that in developing countries, the implementation of management accounting remains unsatisfactory [23]. Believe that there is a lack of exploratory studies in Asian countries and the need for studies which study specific factors as to why Asian countries are not adopting recently developed management accounting practices and what the problems are to employing such techniques.

[1] In their study analysed the management accounting practices that are currently being used by four and five star hotels. They considered the role played by contextual factors and used a qualitative and explanatory methodology for studying multiple cases. They concluded that in the current environment, the need for enough, brief and specific information by part of the organizations has propitiated the emergence of recently developed management tools.

[5] In their research examined the impact of culture, budgetary participation and management accounting systems on managerial performance in Iranian organizations. They used three-way analyses of variance separately for each of the four cultural Hofstede dimensions. They found that the application of management practices and techniques developed in western and advanced countries for effective management performance is not as useful in the Iranian context.

Chenhall and Langfield-Smith [13] Investigated 140 large Australian manufacturing firms and found that traditional management accounting practices were more widely adopted than recently developed practices. They mentioned the factors that influence adoption of management accounting practices, especially the recently developed ones, and concluded that some innovative tools developed in western context may not be applied readily in various European countries due to cultural and historical dissimilarities in the development of costing systems.”

[24] Investigated the effects of economic transition on the adoption of management accounting practices in Indian organizations. They suggested that for companies with international partnerships, the top management of the foreign partner has as great role in strategy evolution as the local management, and that local organizations focus on competitor benchmarking and on cost data. They reported enhancement in planning and budgeting procedures, involving employees in planning, collecting and analysing of cost data and restricted proof that management performance evaluation was gradually more based on quantitative measures.

[23] Studied the extent of new and traditional management accounting practices adoption in Asian countries including: Malaysia, Singapore, China and India. They found that in all four countries there is a lack in implementing new-developed practices. In the other hands, the respondents firms perceived that they obtain very high benefit from implementing traditional MAPs. They concluded that more future researches in the use of MAPs which are grounded in theory are needed.

In this study, we will explore the adoption of management accounting practices (MAPs) by Iranian companies after hypothesising which MAPs will be highly adoptive by considering cultural characteristics of Iran. Iran is selected as scope of this study because of following reasons: (a) Iran as an Asian developing country provides an interesting cultural contrast to western countries because of emphasise on Islamic laws and values [5], (b) The economy of Iran is different from another countries, it is a mixed (in which both the private sector and state direct the economy) and transition economy (which is changing from a centrally planned economy to a free market) with a large public sector. In addition, fifty percent of the economy is centrally planned and dominated by oil and gas production.

Hypothesis Development: In this section we focus attention on national culture elements and their impact on management accounting systems to develop hypotheses of the study.

National Culture Theory: Some scholars state that directly employing new management accounting practices emerged in a foreign context to adopt with a developing country's context is not completely acceptable because, the environmental conditions surrounding different companies are different. In addition, they discuss that the political, economical conditions, social and cultural characteristics of environment surrounding the firm must be considered [7-9]. Therefore, management accounting practices and control systems can't be similarly useful in every country. [17] Has stated that differences in culture among different countries are influencing factors.

[17] Determined the structural elements of culture and identified the following four dimensions of culture: power distance, masculinity, individualism and uncertainty avoidance. Therefore based on this classification, the particular influence of each cultural dimension on management accounting techniques can be considered. This section of the study uses these four cultural dimensions to analyze different adoption rates of management accounting practices in different countries, especially between developing countries (such as Iran) and developed countries (Anglo-American, Europe countries). In this section, based on the influences of cultural differences on management accounting practices' adoption, the hypotheses of the study are developed.

Cultures with a low level of collectivism and power distance and uncertainty avoidance can influence the adoption of economic and financial-based systems, such as those of the US and Anglo-American countries [24-26]. Within the atmosphere of high individualism, the development of capital markets become the most prominent activity and the most important source of investment such as in the UK and USA. Therefore, the pressure for the disclosure of financial reports to investors and shareholders has influenced the development of many accounting tools.

In contrast, Japanese firms which are acting in a high level of collectivism and uncertainty avoidance [27] have developed a reporting system based on non-financial variables and qualitative-orientations [28, 29]. In societies with high level of individualism, the degree of professionalism will be high and the degree of uniformity, conservatism and secrecy preferred in the accounting sub-culture will be low. Additionally, in high uncertainty avoidance existence, the degree of professionalism will be low and the degree of uniformity, conservatism and secrecy preferred in the accounting sub-culture will be high [30, 31].

Activity based costing (ABC) is more often applied in Anglo-American and Scandinavian countries than in Mediterranean and Latin America countries [18]. While, in Japan, ABC is implemented only in a small number of companies [31]. Target costing is mostly applied in Japan and in countries with those same cultural characteristics (South Korea, Taiwan) whereas, in the other European countries, particularly Mediterranean countries, only a small group of companies have adopted it [18].

Similarly, literature highlights the correlation between national culture variables and the adoption of standard or target costs in budgeting. Specially, a culture with a low level of power distance and uncertainty avoidance, individualism and masculinity is correlated to standard costing such as in Anglo-Saxon and Scandinavian countries [32, 33]. In contrast, Japanese firms which are operating in opposite cultural environment, tend to apply target costing [27].

The developing countries with transitional economy characterized by a low level of individualism, the degree of professionalism in the accounting field is low. In addition, in these countries, uncertainty level is high and there is a high degree of anxiety among people. Therefore, there is a need for legal protection of the public by the government. Also, they tend towards a hierarchical order type for power distance, which results in a high level of centralization of authority.

In the following, based on those evidences of the cultural characteristics analysis on management accounting techniques the hypotheses of this study are presented as follow:

Strategic Focus Practices: Strategically focused techniques such as activity-based costing, value chain analysis, target costing, the balanced scorecard, product life cycle analysis and benchmarking help companies to link their operations to strategic targets [13]. Firms in Anglo-American and European countries which have low uncertainty avoidance [17] will be early adopters of strategically focused techniques. In contrast, in developing countries with transitional economy there is a high degree of uncertainty avoidance which causes they adopt these new developed technique very late.

Iran as a developing country with transitional economy that has a high level of uncertainty avoidance, low level of individualism and masculinity is different with other countries especially with Anglo-American and European countries. Therefore, it can be mentioned that Iranian companies are more likely to adopt new developed techniques more lately than Anglo-American and Europeans countries.

The economy of Iran is a mixed (in which both the private sector and state direct the economy) and transition economy (which is changing from a centrally planned economy to a free market) with a large public sector. Some fifty percent of the economy is centrally planned and dominated by oil and gas production. These changes in the economy of Iran cause new challenges and uncertainty in the working environments of Iranian organizations. As a result these challenge and uncertainty influence their adoption of management accounting techniques. Therefore, the above discussions results in Hypothesis 1:

H1: Iranian companies will not make extensive use of the recently developed strategically focused management accounting practices (such as activity-based costing, value chain analysis, product life cycle analysis, shareholder value analysis and benchmarking activity based costing and management, target costing).

Planning Practices: In traditional prospect, planning practises includes budgetary systems to help resource planning in the short-term and capital budgeting and strategic planning for the long-term [13]. Planning practices bridge the gaps from current situation to where organizations want to go in the future and assist them to cope with uncertainty in the environment [34]. Because these practices help managers to reduce role ambiguity, they tend to take a long-term perspective toward planning and use of all budgeting tools extensively.

Previous researches have concluded that financial planning practices, like budgetary planning, have continued their dominance as planning techniques for effective decision making [35, 36]. Several researches have reported that many large companies in USA and Australia which have a low degree of uncertainty avoidance utilize more strategic planning techniques that cover broad time horizons [37, 38].

In contrast, companies in developing countries that have a high level of uncertainty are motivated to utilize budgeting techniques for long term planning. Therefore, the above discussion results in Hypothesis 2:

H2: the use of budgets such as budgeting for controlling costs, budgeting day-to-day planning of operations and capital budgeting will have a high adoptive rate by Iranian firms.

Performance Evaluation Practices: Performance evaluation as an important function of management accounting evaluates the relative benefits that gain from financial and non-financial performances measures [39]; [40]. Most of decisions made by companies that can influence their growth and progresses will be appeared after certain period of time. And real benefits from different performance evaluation techniques may be gained over longer period [41].

In Australia and European countries that have a high level of individualism compared to developing countries [17] personal achievements that are linked to the achievement of company targets are base for performance evaluations; thus non-financial measures are significant, if not more significant, than financial measures [42].

In contrast, in developing countries with high level of collectivism and low level of individualism [17], where individuals as a group are evaluated, rewards will be paid based on the achievement to companies' targets; therefore, financial measures would be more significant than non-financial measures. Based on the above discussions Hypothesis 3 is offered:

H3: Iranian firms will make more extensive use of financial performance measurement than non-financial measurements.

MATERIALS AND METHODS

Sampling and Data Collection Procedures: The current research used a self administration postal questionnaire with the purpose of identifying the Current status of adoption of management accounting techniques in the Iranian manufacturing firms. Totally 162 manufacturing companies listed in Tehran Stock Exchange were selected as the sample of the study. The questionnaires were distributed to Management of companies including Managers of the finance department, Chief Accountant, Chief Controller and Chief Financial Officers (CFOs). Of the 162 questionnaires distributed, 127 companies completed and returned the survey which gives 78% responses rate.

Questionnaire Design: The questionnaire survey was adopted from [13] which were developed based on the features of manufacturing sector. This questionnaire contains two parts; the first part of the survey contained questions to obtain information regarding the companies such as industry type, number of employees (Organization size) and respondents' position.

Table 1: Demographic data

Category	N	Category	N
Industry classification	3	Position of respondent	
Wood and paper products	3	Chief accountant/group controller	93
Chemical products	26	Administrative manager	15
Oil, gas and petrochemicals	5	General manager	11
Metal industry	3	Other	5
Machinery and equipment	7		
Non-metallic, minerals	9	Size of organizations	
General construction	6	(number of employees)	
Food and beverages and sugar	23	<500	64
Pharmaceuticals and healthcare industry		500 - 1000	35
Automotive industry	14	1000-5000	22
Electronics and computer industry	18	5000>	6
Other manufacturing	6		
	7	Total sample	127

The second part of the questionnaire focused on MAPs particularly in the Iranian manufacturing companies which is consisted of two questions: 1) The questionnaire asks respondents to rate extent to which their organization has adopted each of the 42 management accounting practice during the last three years by a three-point rating scale ranging from one (high adoption) to three (low adoption). 2) The benefits derived from the adopted 42 management accounting practices over the last three years. The degree of benefit gained is scaled on a five-point-Likert ranging from one (low benefit) to three (high benefit).

Table 1 shows demographic data related to respondent companies including industry classification respondent position and size of companies.

RESULT AND DISCUSSION

The table 2 presents ranking of all 42 management accounting practices based on the adoption by respondent companies. In order to provide a basis to compare practices based on their relative adoption, techniques were categorized in three groups by considering their ranks: (1) high adoption which was contains 10 practices; (2) moderate adoption that contains 9 practices; and (3) low adoption that includes 23 practices. This classification scheme provides a basis to compare the relative adoption of items across the sample.

In the same way, in the table 3 which presents average benefits derived from applying each practice during the past 3 years, these benefits are categorized

into three groups: high benefit: moderate benefit; and low benefit. Standard deviations are presented to give information related to responses' diversity.

Adoption Rates of Management Accounting Practices

Strategically-Focused Techniques: The survey results shows that the adoption rank of recently-developed management accounting practices is relatively lower than other techniques, excluding product profitability analysis, that is ranked 13 and 48% adoption rate and categorized in moderate adoption level. All other advanced techniques, including activity-based budgeting at a rank of 30 and adoption rate 4%, operation research techniques and shareholders' value analysis at a rank of 28 and adoption percentage of 6%, activity-based management at a rank of 26 and adoption percentage 9%, activity-based costing at a rank of 25 and adoption rate 13%, product life cycle analysis at a rank of 20 and adoption percentage of 28%, were in the relatively low adoption category.

Additionally, adoption rates were relatively low for many aspects of benchmarking such as benchmarking for operational processes and benchmarking product characteristics (ranked 11 at 46% adoption rate), benchmarking within the organization (ranked 30 at 4% adoption rate), and benchmarking management processes (ranked 31 at 3% adoption rate). And benchmarking of strategic priorities and benchmarking with outside organizations (ranked 31 and 32 at 3% and 2% adoption rate respectively) have the lowest adoption rate among Strategically-focused practices.

Table 2: Adoption rates of management accounting practices

Management accounting practices	Adoption %	N	Rank
High adoption			
Budgeting for controlling costs	100%	127	1
Budgeting for planning cash flows	98%	124	2
Budgeting for coordinating activities across business units	96%	121	3
Performance evaluation: return on investment	95%	120	4
Budgeting to plan day to day operations	91%	116	5
Budgeting for planning financial positions	91%	116	5
Performance evaluation Budgets variance analysis	89%	113	6
Performance evaluation: controlling profit	79%	100	7
Performance evaluation: cash flows return on investment	75%	95	8
Budgeting for compensating managers	71%	90	9
Moderate Adoption			
Performance evaluation: residual income	65%	83	10
Performance evaluation: customer satisfaction surveys	57%	72	11
Performance evaluation: Divisional profit	51%	65	12
Product profitability analysis	48%	61	13
Strategic plans: developed with budgets	43%	55	14
Cost volume profit analysis	41%	52	15
Formal strategic planning	40%	51	16
Capital budgeting techniques (e.g. NPV,IRR, Payback)	40%	51	16
Product costing absorption cost	36%	46	17
Low Adoption			
Performance evaluation team performance	32%	41	18
Product costing variable cost	32%	41	18
Strategic plans: developed separate from budgets	31%	39	19
Product life cycle analysis	28%	36	20
Performance evaluation nonfinancial measures	23%	29	21
Long range forecasting	20%	25	22
Performance evaluation Qualitative measures	17%	22	23
Performance evaluation employee attitudes	14%	18	24
Activity based costing	13%	17	25
Performance evaluation ongoing supplier evaluations	9%	11	26
Activity based management	9%	11	26
Target costing	7%	9	27
Operation research technique	6%	8	28
Shareholder value analysis	6%	8	28
Benchmarking for operational processes	5%	6	29
Benchmarking product characteristics	4%	5	30
Activity based budgeting	4%	5	30
Benchmarking within the organization	4%	5	30
Benchmarking management processes	3%	4	31
Value chain analysis	3%	4	31
Benchmarking of strategic priorities	3%	4	31
Benchmarking with outside organizations	2%	3	32
Performance evaluation balanced scorecard	2%	3	32

Table 3: Benefits obtained from adopting management accounting practices

Benefits obtained from management accounting practices	Mean	SD	Rank
High Benefits:			
Performance evaluation return on investment	2.89	0.47	1
Budgeting for controlling costs	2.84	0.51	2
Budgeting to plan day to day operations	2.81	0.53	3
Budgeting for coordinating activities across businesses units	2.78	0.54	4
Budgeting for planning cash flows	2.73	0.55	5
Budgeting for planning financial positions	2.7	0.59	6
Performance evaluation budgets variance analysis	2.65	0.63	7
Performance evaluation divisional profit	2.63	0.67	8
Budgeting for compensating managers	2.54	0.69	9
Moderate Benefits:			
Performance evaluation: customer satisfaction surveys	2.45	0.75	10
Formal strategic planning	2.41	0.79	11
Performance evaluation controllable profit	2.37	0.73	12
Product profitability analysis	2.32	0.72	13
Performance valuation cash flows return on investment	2.29	0.65	14
Capital budgeting techniques	2.25	0.7	15
Formal strategic planning	2.17	0.75	16
Strategic plans: developed with budgets	2.12	0.78	17
Performance evaluation residual income	2	0.82	18
Strategic plans: developed separate from budgets	1.98	0.85	19
Cost volume profit analysis	1.87	0.89	20
Low Benefits:			
Product costing :Absorption cost	1.73	0.67	21
Performance evaluation team performance	1.68	0.65	22
Product costing: variable costing	1.61	0.6	23
Product life cycle analysis	1.6	0.55	24
Performance evaluation non-financial measures	1.58	0.54	25
Long range forecasting	1.57	0.57	26
Performance evaluation: Qualitative measures	1.55	0.53	27
Activity based costing	1.53	0.49	28
Performance evaluation employee attitudes	1.51	0.57	29
Performance evaluation ongoing suppliers evaluations	1.48	0.59	30
Activity based management	1.47	0.61	31
Shareholder value analysis	1.41	0.6	32
Target costing	1.37	0.56	33
Benchmarking of product characteristics	1.32	0.51	34
Activity based budgeting	1.29	0.49	35
Benchmarking: of management processes	1.27	0.47	36
Benchmarking of operational processes	1.27	0.43	37
Benchmarking within the organizations	1.23	0.39	38
Benchmarking strategic priorities	1.22	0.4	39
Value chain analysis	1.19	0.38	40
Performance evaluation balanced scorecard	1.12	0.35	41
Benchmarking with outside the organizations	1.09	0.34	42

Therefore, the results of the survey show that most of Iranian firms have not applied new-developed management accounting practices and majority of them still use traditional management accounting techniques. Therefore, based on the above discussion Hypothesis 1 will be approved.

Planning: The results of the survey in the Table 2 show that all traditional planning techniques, including 6 budgeting are recognized as relatively highly adopted. They are budgeting for controlling costs, which is ranked 1 at 100% adoption rate, budgeting for cash flows and budgeting for coordinating activities across business units (ranked 2 and 3 at 98% and 96% adoption rates respectively), the budgeting for planning day-to-day operations and the budgeting for planning financial positions (both ranked 5 at 91% adoption rate) and budgeting for compensating managers (ranked 9 at 71% adoption rate).

Two other traditional planning techniques, Strategic plans developed with budgets and cost-volume profit analysis are categorized in moderate adoption category, at ranks of 14 and 15 respectively, adoption percentages of 43% and 41% were ranked in moderate adoption category. However, operations research technique has a relatively low adoption rate in comparison to other planning practices (ranked 28 and 6% adoption rate).

In contrast, long term planning practices, which include formal strategic planning and capital budgeting tools (both ranked 16 at 40% adoption rate) and especially long-range forecasting (ranked 22 at 20% adoption rate) have relatively low adoption rates.

These results show that both long-term planning and traditional budgetary planning techniques have relatively high or moderate adoption rate in comparison to another practices and are used widely especially, traditional planning practices. Therefore, based on the result and above discussions this can be told that Iranian manufacturing firms are still using planning practices especially traditional planning techniques in a wide range. Hence, Hypothesis 2 is confirmed.

Performance Evaluation Practices

Financial Measures: The results obtained from table 2 show that financial measures of performance are relatively highly adopted by Iranian firms especially Return on investment (95% adoption rate and a rank of 4), Budgets variance analysis (89% adoption rate and a rank

of 6), controlling profit at (79% adoption rate and a rank of 7) and cash flows return on investment (75% adoption rate and a rank of 8).

And two other financial measures of performance such as performance evaluation based on residual income at 65% adoption rate and a rank of 10 and divisional profit at 51% adoption rate and a rank of 12 have relatively moderate adoption rate among financial performance measures. Therefore, it can be seen that Iranian manufacturing firms apply financial measures of performance in highly or moderately rates to evaluate short-term profitability.

Non-financial Measures: Table 2 shows that the performance evaluation based on customer satisfaction surveys with rank of 11 and adoption rate of 57% is the only performance evaluation practice that is included in moderate adoption level. More than fifty-percent of Iranian manufacturing firm are using this non-financial performance evaluation tool, which shows these non-financial measures are slowly being adopted in Iranian firms.

And the other non-financial measures are included in the low adoption rate category: team Performance (ranked 18 at 32% adoption rate), nonfinancial measures (ranked 21 at 23% adoption rate), qualitative measures (ranked 23 at 17% adoption rate), employee attitudes (ranked 24 at 14% adoption rate), ongoing supplier evaluations (ranked 26 at 9% adoption rate) especially, balanced scorecard that is the lowest in adoption rate.

In the other hands, importance of some non-financial measures is growing slowly and Iranian firm have started to apply these practices to monitor areas of strategic importance [39]. Therefore, based on the above discussion and results shown in the table 2 it can be mentioned that Iranian firms will make more extensive use of financial performance measurement than non-financial measurements. This means that Hypothesis 3 is true.

Benefits Obtained from Adopting Management Accounting Practices:

Table 3 lists practices in order of the average benefits derived from using each practice during the last three years. Standard deviations are provided to show the extent of diversity of responses. Results from the table shows that most of recently-developed techniques have relatively low adoption and low benefit rate. The rankings for benefits derived from these techniques were: product life cycle analysis (ranked equal 24), shareholder value analysis

(ranked 32), target costing (ranked 33) and value chain analysis (ranked 40). In addition, adoption rates were relatively low for many aspects of benchmarking and they provided relatively low benefits especially, benchmarking with outside organizations which received relatively the lowest benefit ranking (ranked 42). This means that Iranian manufacturing firms don't have adequate knowledge about the usefulness and benefits of new-developed management accounting practices and still rely on traditional practices. Therefore, the above discussion supports Hypothesis 1.

The data presented in Table 3 indicate that six traditional planning techniques concerned with budgeting provided relatively high benefit, they were budgeting for controlling costs (rank 2), budgeting to plan day-to-day operations (ranked equal 3), budgeting for coordinating activities across business units (rank 4), budgeting for planning cash flows (ranked equal 5), budgeting for planning financial position (ranked 6) and budgeting for compensating managers (ranked equal 9). In contrast, two other planning techniques concerned with long-range planning provided relatively moderate or low benefit. They were capital budgeting tools (ranked equal 15) and formal strategic planning (ranked equal 16) and long-range forecasting (ranked equal 26). Based on the above results and discussion this is obvious that Iranian manufacturing firms still apply traditional planning techniques which provide more benefit for them and is suitable for their uncertain environment and unstable economy. Therefore, the above discussion and result supports the hypothesis 2.

Both table 2 and 3 confirm that financial measures of performance are important (high adoption rates and high derived benefits) in Iranian manufacturing sector. The results in table 3 shows that financial measures of performance provided relatively high or moderate benefits such as return on investment businesses units (rank 1), Budgets variance analysis (rank 7), divisional profit (rank 8), controlling profit (12) and cash flows return on investment (rank 14). In contrast, the performance evaluation based on customer satisfaction surveys the only non-financial performance evaluation measure that provided moderate benefit. However, the other non-financial measures were included in the low derived benefits category: team Performance (ranked 22), non-financial measures (ranked 25), qualitative measures (ranked 27), employee attitudes (ranked equal 29), ongoing supplier evaluations (ranked 30) and balanced scorecards that is the lowest in this category. Therefore,

financial measures of performance are adopted in highly or moderately rates which provide higher benefits than non-financial measures. And, Iranian firms apply more financial performance measurement to evaluate performance.

CONCLUSION

The main focus of the current study is on identifying relative adoption and benefits derived from both traditional and new-developed management accounting technique in Iranian manufacturing firms. Results indicate that most of Iranian firms have not applied new developed management accounting practices and majority of them still use traditional management accounting techniques. The adoption rank of advanced management accounting practices is relatively lower than other techniques. In contrast, all traditional planning techniques, including six budgeting are recognized as relatively highly adopted such as budgeting for controlling costs, budgeting for cash flows, budgeting for coordinating activities across business units and the budgeting for planning day-to-day operations. In contrast, long term planning practices such as capital budgeting tools, formal strategic planning and especially long-range forecasting, have relatively low adoption rates.

In addition, the results obtained show that financial measures of performance are relatively highly adopted by Iranian firms such as Return on investment, Budgets variance analysis, controlling profit. And they employ more financial performance measurement than non-financial measurement to evaluate performance. However, there is a continually growth in applying non-financial measures in Iranian manufacturing sector.

Additionally, most of recently-developed techniques have relatively low adoption and low benefit rate. Based on the results this is obvious that Iranian manufacturing firms still apply traditional planning techniques which provide more benefit for them and is suitable for their uncertain environment and unstable economy. This means that they don't have adequate knowledge about the usefulness and benefits of new-developed management accounting practices and still rely on traditional practices. In the essence, Iranian manufacturing firms are still making extensive use of traditional management accounting practices, however, there is a continually growth in applying new-developed practices.

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