Review of Effect of Management Ability on Costs Stickiness in Tehran Stock Exchange

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ABSTRACT

Understanding of cost behavior in reaction to changes in level of production and sales is highly important for firm managers. In the traditional model of cost behavior, costs change relative to variation in activity; that is, the amount of change in costs depends only on the level of change in activity, not on the trend of this change. However, new theories regarding cost behavior suggest that costs increase more when activity rises than they decrease when activity falls by an equivalent amount. This kind of behavior is known as "cost stickiness". The purpose of the present research is to study the impact of managerial Ability on cost stickiness in firms listed in Tehran Stock Exchange (TSE). To that end, one main hypothesis and two sub-hypotheses have been developed which analytically examine the nature of relationship between managerial Ability and stickiness of costs. The statistical population is consisted of all firms listed in TSE in the 7-year time-period from 2007 to 2013, among which 88 firms have been selected as the sample group. In order to examine the hypotheses, regression analysis of the panel data has been carried out. The results suggest that in there is a significant relationship between earnings management and cost stickiness in the studied period. In other words, managerial Ability would increase cost stickiness in the firms. Therefore, efforts to identify factors affecting cost structures in firms should take into account the manager's abilities in making decision regarding costs and resources, especially decisions motivated by agency costs.

KEYWORDS: Costs stickiness, Management Ability, CGS, SGA

INTRODUCTION

In traditional models of cost behavior in management account, variable costs in relation to the changes in activity volume are proportionally increased or decreased. That is to say the greatness of changes in costs solely depends on the greatness in activity volume and direction of the changes (increase or decrease) in activity volume doesn't have any effect on the greatness of changes in the costs (Horn Gran et al, 2008). But results obtained from the studies of some researchers (Calleja et al., 2006; Norn et al, 1997) show that increase rate in the costs when activity level is increased, is more than that of decrease in the costs when activity level is decreased. Such behaviors of the costs are called "costs stickiness". Sticky of costs is one of the characteristics of behavior of the costs compared to the changes in activity level and shows that greatness of increase in the costs when activity level is increased is more than the greatness of decrease in the costs when activity level is decreased. On the basis of the hypothesis of deliberate decisions, costs experience adherence under the influence of management decisions (Anderson, 2003 and 2005). When managers feel that decrease in sale, will be short term and cross-sectional and decrease in sale in the current period will be compensated with increase in sales of later periods, they try to maintain the resources and bear the costs for preserving the resources and they will be hoping for better days. When managers, due to the decrease in sale, decrease resources of their own operational activities, they should spend more time and cost to provide for resources and preparing them. Therefore, for the purpose of profit gaining in long-term, they try to protect their resources to benefit from probable future revenues. The set of all of the above measures that take place by management in decrease (increase) periods is called Ability and efficiency of management. The present research tries to test the effect of management Ability on costs stickiness. In doing so, it is assumed that top managers of the companies that are knowledgeable and more smart regarding their own business, will make appropriate and better judgments and decisions in this regard. And thus, in addition to maintaining the company's resources in order to profit in the long run, they try and seek for benefit from the future incomes. Consequently, if managers are capable and efficient, they will preserve the resources relating to the operational activities in periods when the sale is decreased and in this way they will prevent the companies' costs to be increased in long-term.

One of the primary hypotheses of management accounting is indicative of the fact that changes in costs have appropriate relationship with increase and decrease in activity level. But, recently this hypothesis has been discussed

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with introducing the discussion of costs' adherence by Anderson et al; that is to say increase rate in costs due to the increase in activity level is more than decrease rate in costs due to the same amount of decrease in activity level (Namazi and Davanipour, 2010). If increase rate of the costs due to the increase in activities is more than their decrease rate due decrease in activities at the same rate, then, the costs are called "costs stickiness". In the meantime, it is possible that the ability of manager not to be ineffective on costs stickiness .

Hence, in this research it is assumed that powerful management team can offer better decisions for decreasing the costs and for preserving the resources of companies. In general, this paper seeks to study adherence of the costs from the point of view of management and its capabilities. Therefore, the main question in this research is: "is the Ability of management effective on costs stickiness?"

NECESSITY AND IMPORTANCE OF THE RESEARCH

The thought of creating the relationship between costs and activities was offered in the late 1960s and early 1970s in the works of some scientists, including Solomon and status. Then, many theories was presented in this regard, including Noreen's theory according to which the costs classified into fixed and variable in relation to the activity level; and variable costs vary according to the changes in activity levels. After that many theories were offered in this regard. One of them is that of Noreen which states that in relation to the activity level costs are classified into the two categories of fixed and variable and that, variable costs vary proportionally with activity level.

One of the duties of managers is planning. Planning can play an important role in preventing mistakes and identifying the hidden opportunities. Furthermore, decision making is the basic element of all management duties and it is based on management abilities. So, if management capabilities are reflected in planning, this will be led to better and appropriate decision makings by managers. Management accounting also plays an important role in preparing and offering understandable, reliable, relevant and timely information. Therefore, it is one of the most important tools for offering the required information to managers to make decisions. In other words, the main emphasis of management accounting is on offering the helpful and timely information for planning and controlling by managers. According to Yasukata and Konjivara (2011), with identifying and predicting the cost behavior against the changes in activity level or income level management accounting, can perform its stewardship responsibility well.

For planning and achieving the goals, managers need information that related to the costs. They should be aware of costs trends, that is, the way they change. Cost trends point out the way in which costs response to the changes in the amount of managers abilities. In other words, by cost trends it is meant a model according to which a specific cost reacts to changes in activity level. Some theories claim that costs react differently against the ascending and descending changes of activity level.

This feature has caused them to be remembered as costs stickiness; and these hypotheses challenge one of the primary hypotheses of management accounting stating that changes in the costs are proportional to increase and decrease in activity level. Cooper and Kaplan's fundamental hypothesis about the cause of creation of costs stickiness states that in order to provide resources, managers make contracts that breaching them is costly, therefore, managers may decide to protect the under use resources, that is, while the company may report the decrease in income, the costs are not decreased in the same proportion as decrease in income. In this regard, economic macro-factors may have some effects, because it is possible for managers in case of facing with macroeconomic factors such as inflation and interest rates make specific decisions that are effective in sticky of costs.

CONCEPTS AND DEFINITIONS OF VARIABLES:

Costs stickiness: sticky of the costs is indicative of the fact that increase rate of the costs, when income level is increased, is more the decrease rate of the costs when income level is decreased. This feature of the costs is call costs stickiness.

Management Ability: costs inherences that observed in reduction periods of the sale, cause decrease in profit of a period. But, incidence of costs stickiness shows that managers emphasis more on long-term profits. Bearing the costs of additional resources during periods of decline in sales that takes place for the purpose of readiness for increase in sale in future, cause bearing less cost load in long run and gives the ability to company not to lose sales opportunities in the future. However, the requirement for preserving the resources to achieve more profits in future is assuming the decrease in demand as temporary and expecting for increase in sale in future by managers.

EMPIRICAL RECORD OF THE RESEARCH

Although the subject of costs stickiness is a new one in financial literature during the recent years, relatively good studies have been done in this regard and some of them are as follows:

Bunker et al (2006) studied the relationship of management optimism and cost behaviors and showed that in case of increment (decrement) in sale, the more optimism (pessimism) of management is, the more increment (decrement)

in costs will be and when the sale increases, the more prediction of analysts is about future sales, the more incremental adjustments of the costs will be.

Calleja (2006) tested the adherence of operational costs using data from the four countries of America, England, France and Germany. Results obtained from his research showed that adhesion severity of the costs in France and Germany is more than the severity of the costs in America and England.

Balakrishnan and Soderstrom (2008) studied the adherence of costs in hospitals of California. This research studied the costs of service affairs of the wards and the costs of taking care of the patients separately, and the presence of adherence in the above costs was approved.

Findings of Kama and Weiss (2010) showed that taking the profit as a target by management causes decrease in severity of costs stickiness , company related motivations and policies lead to the decrease in non-essential costs in the company and consequently, it shows less adherence cost against the decrease and increase in production levels.

Yasukata and Kajivara (2011) studied the relationship of deliberate decisions of managers with adherence of the costs and showed that optimism rate of managers in predicting the future sale, doesn't have significant relationship with adherence of sale cost, but it has positive relationship with the stickiness of public and administrative sale.

Banker et al (2014) examined the effects of costs stickiness in conservational researches. They came to the conclusion that cost adherence has unknown effects on conservational researches. They also showed that a considerable part of conditional conservation is affected by costs stickiness.

Bolou et al (2012) have studied the relationship between management perspective and costs stickiness in Tehran Stock Exchange. According to their research when managers are optimistic about future sales, adhesion strength of costs is increased.

Kordestani and Mortazavi (2012) studied the effect of deliberate decisions made by managers on adherence of the costs in companies listed on Tehran Stock Exchange during the years 2001 to 2009. Their findings show that adherence of these costs in case of management's   great optimism, is more than the case in which optimism state is less; and this is considered as the strong evidence for confirmation of hypothesis of deliberate decisions in sale, public and administrative costs.

Saraee (2013) studied adherence of behavior of administrative, public and sale costs according to the decisions made by managers and price bulbs in companies listed in Tehran Stock Exchange during tahe years 2007 to 2011. His findings show that costs stickiness in case of great optimism of management, is more than that of less optimism; and this, is considered as strong evidences about the confirmation of deliberate decisions on sale, public and administrative sales.

Heidari (2014) studied the effect of having too much confidence on improvement of adherence of distribution, sale and administrative costs. Statistical universe of the research consists of companies listed on Tehran Stock Exchange during the years 2002 to 2012. Results obtained from the research show that behavioral factor of management's excessive confidence, causes increase in costs stickiness.

According to theoretical foundations and research background, conceptual model of the research has been displayed in the form of Figure 1.
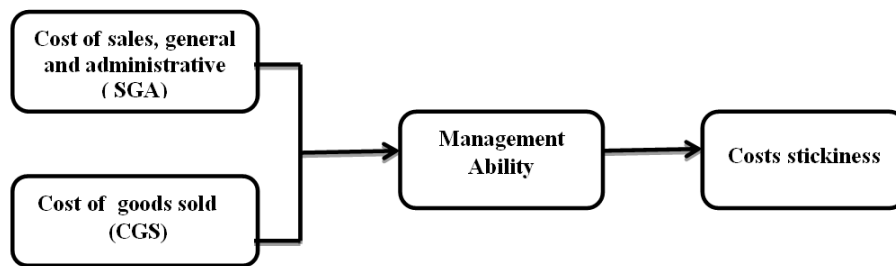
Figure 1: conceptual model of the research

Finally, hypotheses derived from the theoretical and conceptual model of the research is as follows:

THE MAIN HYPOTHESIS
Ability of managers has significant effects on sticky of the costs.

To test this hypothesis, two secondary hypotheses have been developed; and during the continuation of discussion, the way each one of them will be tested, is mentioned:

SECONDARY HYPOTHESES

The first secondary hypothesis: ability of managers has significant effects on sticky of Cost of sales, general and administrative(SGA)
The second secondary hypothesis: ability of managers has significant effects on sticky of cost of goods sold (CGS).

RESEARCH METHODOLOGY

Research data was derived and gathered from financial statements, explanatory noted, reports from Tehran Stock Exchange and by visiting the website of informatics Bourse Company (Kodal), site of management of research, development and Islamic studies, and site of Tehran Stock Exchange. In processing the models, EViews software was used.

To analyze data of the research, descriptive statistics (including central and dispersion indices) and inferential statistics based on panel analysis (including correlation, multiple variable regression methods) were used.

Statistical universe of the research consists of all the Companies listed in Tehran Stock Exchange during the years 2007 to 2013.

Statistical sample was selected using the screening method and from among the companies that had the following conditions:

1) Companies with the same financial period and leading up to the end of the year
2) Being active between the time domain between 2007-2013
3) Completeness and availability of their data bank from 2007 to 2013
4) Lack of experiencing the loss in the considered year
5) Not being among the intermediary institutions, investments, financial and insurance institutions

According to the above conditions, 88 companies were selected; and the number of observations was 616 (companies-years).

VARIABLES AND MODELS OF THE RESEARCH

In studying the subject of the present research, at first we measure the management power (independent variable) and then, the way testing the research hypotheses is done in the form of multi-variable regression models, are explained.

INDEPENDENT VARIABLE

Management ability evaluates the efficiency of managers using the (MA) privilege. This variable is measured using Data Envelopment Analysis (DEA) method. Capable and effective managers are those who earn a higher rate from the ration of inputs to definite outputs on the way for creating incomes and compared with other managers. Therefore, optimization model Demirjian et al (2012) is used as follows:

$$\max_{v} \theta = \frac{\text{Sales}}{v_1 COGS + v_2 SG\&A + v_3 PPE + v_4 OpeLease + v_5 R\&D + v_6 Goodwill + v_7 OtherIn\tan}$$

where variables of net sales, cost of goods sold, selling and administrative costs, property, plant and equipment, operating rental costs, expenditures of research and development, lease and other intangible assets have been used. After calculating the efficiency of company through optimization model of Demerjian et al (2012), the following Tobit regression is tested for the purpose of comparing it with the specific characteristics of the company.

$$Firm\,Efficiency = \alpha_0 + \alpha_1 Ln\,(TotalAssets) + \alpha_2 MarketShare + \alpha_3 PositiveFreeCashFlow + \alpha_4 PositiveF\alpha Ln\,(age) +$$

$$\alpha_5 BusinessSegmentCocentration + \alpha_6 ForeignCurrencyIndicator + YearIndicator + \varepsilon_{it}$$

The result of residual values (ε) gives the (MA) privilege where:
Ln (Total Assets): used for measuring the size of company; and is equal to natural logarithm of total assets.

Market Share: shows the company's market share in sales.
Positive Free Cash Flow: shows positive, free, cash flow variable.
Ln (age): is natural logarithm of the age of company.
Business Segment Concentration: shows the number of commercial parts of the company in complex operations.
Foreign Currency Indicator: is indicative of foreign exchange rate (US Dollar).
Year Indicator: the virtual variable that in considered year is 1, otherwise it is 0.

DEPENDENT VARIABLE

Dependent Variable: is variable of input stimulus that measured, manipulated or selected by researcher for the purpose of determination of its effect on or relation with another variable.
The way sticky of costs measured according to model Namazi and Davanipour (2010) is as follows:

$$Ln\left[\frac{C_{it}}{C_{it-1}}\right] = \beta_0 + \beta_1 \times Ln\left[\frac{Sales_{it}}{Sales_{it-1}}\right] + \beta_2 \times DD_{rep} \times Ln\left[\frac{Sales_{it}}{Sales_{it-1}}\right] + \varepsilon_{it}$$

C: distribution, sale, public and administrative costs or the cost of sold goods of the company in the year (t) for the company (t).
Sales: net sale of the company I in the year t.
DDrep : virtual variable that if the company I in the year t compared to the year t-1 has been encountered with reduction in sales, it is equal to 1 and otherwise, it will be zero.
β1 coefficient shows the percentage of increase in costs, due to the increase in sales. Also, since at the time of decrease in sales (DDrep) is one (at the time of decrease in sale it is 1 and the time of increase in sale it is zero) (β2) coefficient under the conditions of decrease in sales, is negative and otherwise, it will be zero. Therefore, the sum (β1+β2) is an indicative of the rate of decrease in costs due to the 1% decrease in sales. To prove the sticky of the costs, relation (β1+β2<β1) should be established.
In continuation, one-variable regression model used for testing the hypotheses as follows and where:

$$SC_{it} = \omega_0 + \omega_1 MA_{it} + \varepsilon_{it}$$

SC: is dependent variable of sticky of the costs; and the way it is measured was explained before.
MA: this variable shows the abilities of manager; and the way is measured was explained before.
Also, for classification of capable and incapable managers we calculate the result of the remaining amounts of (ε) and then consider the amounts more than and less than the average as capable and incapable, respectively.

FINDINGS OF THE RESEARCH

DESCRIPTIVE STATISTICS OF VARIABLES OF THE RESEARCH AND INFERENTIAL STATISTICS

In early study of descriptive statistics of variables of the research there were some outlying amounts that were eliminated after the screening process on observations; and finally, descriptive information of variables of the research was obtained as the Table 1.

According to table 1, the average of logarithm of the ration of total operational costs to that of the previous year about the sample companies is 0.1663. Also, the least at the most rate for this variable is -1.19310 and 1.9677, respectively.

Table 1) descriptive statistics of the research variables

Statistic	Observations	Mean	Median	Maximum	Minimum	Skewness	Kurtosis
MAAB	616	0.092073	0.093826	0.217809	0.006924	0.016274	4.519681
LNSGA	616	0.166382	0.154404	1.967755	-1.931051	-0.172748	12.02192
LNCGS	616	0.188942	0.188261	2.689203	-1.992073	0.923384	22.69362
LNSALES	616	0.215390	0.197147	2.924721	-2.372554	-0.258667	20.15613
DECDUMMY	616	0.159091	0.000000	1.000000	0.000000	1.864109	4.474903

STUDYING THE CORRELATION AMONG THE RESEARCH VARIABLES

Results obtained from the study concerning the correlation among the research variables have been appeared in table 2. By accomplishing the correlation test, we begin to study the primary relation among the variables and considering the results it can be said that there are relations among the variables; and hence, these relations can be studied more accurately.

Table 2) matrix of Pearson correlation coefficients among the variables of the research

	Statistic	MAAB	LNSGA	LNCGS	LNSALES	DECDUMMY
	MAAB	1.000000				
	Probability	-----				
	LNSGA	0.016435	1.000000			
	Probability	0.6839	-----			
	LNCGS	-0.028291	0.250162	1.000000		
	Probability	0.4834	0.0000	-----		
	LNSALES	0.141553	0.326575	0.577554	1.000000	
	Probability	0.0004	0.0000	0.0000	-----	
	DECDUMMY	-0.106354	-0.179360	-0.420684	-0.570194	1.000000
	Probability	0.0082	0.0000	0.0000	0.0000	-----

Results obtained from stability test have been appeared in table 3. According to the Levin, Lin & Chu test, since the probability value has been less than %5, all of independent variables have been dependent and checksum in research period at stationary level. Stationary means that the average and variance of variables of the research, and covariance of the variables, respectively over the time, and between different years have been fixed. As it can be seen in table 3, all of the variables are stable and there is no need to co-integration test.

Table 3) results obtained from stability of research variables

Series	Levin, Lin & Chu t		result
	Statistic value	Probability	
MAAB	-6.35645	0.0000	Stability
LNSGA	-25.0383	0.0000	Stability
LNCGS	-24.1288	0.0000	Stability
LNSALES	-29.2324	0.0000	Stability

Results obtained from F Limer's test and Hausman's test have been appeared in table 4. Probability of F Limer for both models of the research is less than 5%, hence, in order to estimate both models panel method is used; and since, probability of Hausman's test of both models is less than 5%, fixed effects model has been used to estimate both of the models.

Table 4) results obtained from F Limer's test and Hausman's test

Model	test	Statistic	Probability	result
First	Redundant Fixed Effects Tests	2.154961	0.0000	Panel Data method
	Hausman Test	155.249063	0.0000	fixed effect
Second	Redundant Fixed Effects Tests	1.308733	0.0000	Panel Data method
	Hausman Test	138.053017	0.0000	fixed effect

Results of the test show the fixedness of variance of error sentence in table 5 show that hypothesis 0 indicative of the presence of homogeneity of variance in both models of the research is rejected. Therefore, it can be said that in each model of the research, the assumption of fixedness of variance of error sentence has not been established.

Table 5) results obtained from the test of fixedness of the variance of error sentence

Model	Statistic type	Statistic value	Probability	result
First	F-statistic	5.193677	0.0000	Rejected
Second	F-statistic	2.791055	0.0108	Rejected

Therefore, in order to fix the problem of unequal variants, generalized least square regression is used.

Results obtained from the test of lack of self-correlation of the error in table 6 shows that, the amount of this statistic in both models are within their own authorized limits and there is no reason for rejecting the lack of self-correlation among the remaining sentences. In other words, the assumption of lack of self-correlation of error component in the models to be used in research is established.

Table 6) results obtained from the test of lack of self-correlation of error component

model	Statistic type	Statistic value	result
first	Durbin-Watson stat	1.307667	accepted
Second	Durbin-Watson stat	2.629670	accepted

ESTIMATION OF THE MODEL AND TESTING THE HYPOTHESES:
In order to test the first secondary hypothesis multi-variable regression model is used according to the following:

$$\ln\left(\frac{SG\&A_{it}}{SG\&A_{it-1}}\right) = \beta_0 + \beta_1 \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \beta_2 DecDummy_{it} * \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \beta_3 MAAB * DecDummy_{it} * \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \varepsilon_{it}$$

In order to test this hypothesis results of model estimation offered in table 7 have been used. Probability amount (or significance level) of F equals 0.03280 and since it is less than 0.05, hypothesis 0 at confidence level of 95% is rejected, that is, the mode is significant. The amount of Durbin-Watson statistic is 2.2757 and this, shows lack of self-correlation. Results relating to the determination coefficient show that, almost 17% of the changes in dependent variable is described by independent and controlling model.

In general, results show that variable coefficient of Ability of managers has been 2.2938 which is an indicative of positive effect of managers' Ability on sticky of Cost of sales, general and administrative(SGA); and according to statistic t, variable coefficient of managers Ability is significant. According to the aforesaid cases, the first secondary hypothesis of the research can be considered as being confirmed. That is to say, Ability of managers has significant effect on adherence of sales, public and administrative costs. In other words, together with increase in Ability of managers, sticky of Cost of sales, general and administrative(SGA) is also increased.

Table 7) results of estimation of the first secondary hypothesis of the research

Ln (SG&A it/SG&A(it-1)) = β0+β1 Ln (Salesit/Sales(it-1))+β2 DecDummyit*Ln (Salesit/Sales (it-1))+β3 MAAB*DecDummyit*Ln (Salesit/Sales(it-1))+εit				
Variable	Coefficient	Std. Error	t-Statistic	Probabilityy
c	0.118098	0.012937	9.128599	0.0000
LNSALES	0.259549	0.042315	6.133743	0.0000
DECDUMMY*LNSALES	-0.030740	0.058345	-0.526863	0.5985
MAAB*DECDUMMY*LNSALES	2.938451	1.373516	2.139364	0.0328
R-squared		0.173465		
Adjusted R-squared		0.161190		
S.E. of regression		1.008159		
F-statistic		14.13127		
Prob(F-statistic)		0.000000		

In order to test the second secondary hypothesis the following multi-variable regression model is used:

$$\ln\left(\frac{CGS_{it}}{CGS_{it-1}}\right) = \beta_0 + \beta_1 \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \beta_2 DecDummy_{it} * \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \beta_3 MAAB * DecDummy_{it} * \ln\left(\frac{Sales_{it}}{Sales_{it-1}}\right) + \varepsilon_{it}$$

In order to test this hypothesis results of model estimation offered in table 8 have been used. Probability amount (or significance level) of F equals 0.0001 and since this is less than 0.05, hypothesis 0 at confidence level of 99% is rejected, that is to say the model is significant. The amount of Durbin-Watson is 1.0067 and this, shows the lack of self-correlation. Results relating to determination coefficient show that almost 52% of the changes in dependent variable are explained by dependent and controlling model.

In general, results show that variable coefficient of managers' ability is 7.8422 which is an indicative of positive effect of managers' abilities on sticky of cost of sold goods; and according to the statistic t, variable

coefficient of managers' Ability is significant. According to the above said things it can be said that the second secondary hypothesis of the research can be considered as being confirmed. That is to say, managers' Ability has significant effect on of cost of the sold goods. In other words, together with increase in managers' Ability, sticky of cost of the sold goods is also increased.

Table 8) results of the second secondary hypothesis of the research

Ln (SG&A it/SG&A(it-1))= β0+β1 Ln (Salesit/Sales(it-1))+β2 DecDummyit*Ln (Salesit/Sales (it-1))+β3 MAAB*DecDummyit*Ln (Salesit/Sales(it-1))+εit

Variable	Coefficient	Std. Error	t-Statistic	Probabilityy
C	0.075739	0.023742	3.190080	0.0015
LNSALES	0.538580	0.097384	5.530468	0.0000
DECDUMMY*LNSALES	-0.507044	0.091607	-5.534996	0.0000
MAAB*DECDUMMY*LNSALES	7.842219	1.928030	4.067478	0.0001
R-squared			0.520345	
Adjusted R-squared			0.513221	
S.E. of regression			1.006756	
F-statistic			73.04524	
Prob(F-statistic)			0.000000	

RESEARCH LIMITATIONS

One of the limitations that the present research has been encountered with is the lack of possibility to control some conditions such as political and economic ones that are effective in performances of companies (at micro level) market performance (at macro level), therefor in generalizing the results of the research the necessary precautions should be done. Furthermore, the selected period for data extraction may be affected by the effects of commercial periods, bubbles of promissory note gaming, events and political tensions or decisions of the exchange authorities that can limit the reliability of the results. Also, difference in specialties of considered companies such as various fields of industry, type of ownership, shareholders, etc. can be effective on the results of the research.

In Iran, data bases are not updated and they are not available for people in one hundred percent manner and availability to some information of the companies is only possible through direct referral to their financial statements; and this causes spending a lot of time for data collection. Meanwhile, the time limit and the number of firms in Tehran Stock Exchange are limited that can be effective on research results. This is while foreign researches do not have the mentioned limitations and most of the time of the research is spent for data analysis; and consequently, this provides more acceptable results compared with the researches done in Iran.

Lack of availability for classified information related to the components of administrative, public and sales costs made the research to be done only on the adherence of the total of administrative, public and sales costs. Making use of Tehran Stock Exchange data and the statistical technique of combinational data have also their own limitations.

CONCLUSION AND PROPOSALS

In the first secondary hypothesis it was acknowledged that managers' abilities has significant effect on adherence of sales, public and administrative costs. According to table 9, presence of positive and significant relation between managers' abilities and adherence of sales, public and administrative costs at confidence level of 95% is confirmed and it can be said that together with managers' abilities, adherence of sales, public and administrative costs of companies is increased.

In the second secondary hypothesis it was acknowledged that managers 'abilities has significant effect on sticky of cost of sold goods. According to table 9, the existence of positive and significant relationship between managers' abilities and sticky of cost of the sold goods at confidence level of 99% is confirmed and it can be said that together with managers' abilities, sticky of cost of the sold goods of companies is increased.

According to the results obtained from testing the secondary hypotheses of the research at the level of general model and the main hypothesis of the research, there is a direct and significant relationship between managers' capabilities and sticky of operational costs of the companies active in the Tehran Stock Exchange.

Table 9) results of the primary hypothesis

ability of managers has significant effects on costs stickiness				
statistic	Coefficient	t-Statistic	Probability	result
SGA	2.938451	2.139364	0.0328	accepted
CGS	7.842219	4.067478	0.0001	accepted

The above results are in line with the findings of Banker et al (2006) which shows that management optimism effects on sticky of the costs and the findings of Comma and Weis (2010) which shows that targeting the benefit by management is effective on the severity of adherence of the costs and Bolou et al (2012) which shows that when managers are optimist for sales in future, the intensity of costs are increased, and Kordestani and Mortazavi (2012) which shows that behavioral factor of confidence causes increase in adherence of the sales, public and administrative costs and Heidari (2014) which shows that confidence behavioral factor causes increase in costs stickiness more than that of management.

However, they are somehow different from the results of findings of Yasukata and Kajivara (2011) which shows that the amount of managers' optimism has no significant relationship with costs stickinessof the sales, but it has positive relationship with adherence of sales, public and administrative costs, and Saraee (2013) which shows that the intensity of administrative, public and sales adherence in periods that in the period before that decrease in income has occurred was less and during the years after bulb, was more compared with the previous ones, and also in case of management optimism adherence of sales, public and administrative costs is effective.

According to the results obtained from the research it is proposed that managers of the companies, identify and control the adherence of their companies and consider it in the processes of decision making, planning and budgeting activities of the company to predict the future costs, relationship between costs and incomes and the effect of changes in income on the amount of costs and in this way, make more accurate decisions and offer more comprehensive budgeting. Furthermore, it is proposed that considering the reasons and consequences due to the costs stickiness, managers seek to increase the response capacity of the company against decrease in demands for goods and services.

For future researches, studying the relationship between adherence of costs and variables such as corporate governance, number of employees, earnings quality and cost structure is also recommended

REFERENCES

[1] Azar, Adel & Momeny, Mansoor (2010) Statistics and Its Application in Management ,Fourteenth Edition, first volume, Samt Publication, Tehran

[2] Iran Zadeh, & Mohamadzadh (2010) Management Expense: Evidence for Sticky Behavior of Selling, General, and Administrative Costs in Iranian Firms, Management research, Islamic Azad University Science and Research branch, No. 84 ,123-133

[3] Bozorgasl, Mousa & Salehzadeh, Bistoon (2014) Managerial ability and accruals quality , Journal of accounting Knowledge, Vol. 5 ,No. 17,119-139

[4] Bolou, Ghasem; Babajani, Jafar & Meymand, Mehdi (2012) Journal of Financial accounting research, Year. 4, No. 1,47-66

[5] Sarayi, Anvar (2013) Stickiness of behavior administrative costs, Public And sales according to the decision of Management and price bubble, Master thesis, Supervisor : Azita Jahanshad, Advisor : Zahra Pourzamani

[6] Heidari, Mehdi(2014) Examining Managerial Overconfidence Behavioral Explanation Effect on Cost Stickiness: Comparison with economic and Agency Theory Based Factors, Quarterly Journal of the Iranian Accounting , Vol. 21, No. 2

[7] Khodadadi, Vali; Nikkar, Javad & Hajizadeh, Saeid (2015) Impact of Behavior Stickiness cost and conservatism, conditional cost analysis, Developments of Accounting Shiraz University, Vol. 7, No. 1,49-60

[8] Kordestani ,gholamreza& Mortezavi, Morteza (2010)The Impact of Managers' Deliberate Decisions on Costs' Stickiness, Quarterly Journal of the Iranian Accounting , Vol. 19, No. 67,73-90

[9] Namazi, Mohammad & Davanipour, Iraj (2010) Empirical Evaluation of the Sticky Behavior of Costs in the Tehran Stock Exchange Market, Quarterly Journal of the Iranian Accounting ,Vol. 17 ,No. 62,85-139

[10] Anderson, M., R. Banker, and S. Janakiraman. 2003. Are selling, general, and administrative costs ''sticky?'' Journal of Accounting Research 41 (1): 47–63.

[11] Banker, R., Basu, S., Byzalov, D. and Chen, J. (2014). The Confounding Effect of Cost Stickiness in Conservatism Research, Working paper, Fox School of Business, Temple University, Philadelphia, PA, United States

[12] Banker, R., R. Huang, and R. Natarajan. 2006. Does SG & A expenditure create a long-lived asset? Working paper, Temple University, Baruch College–CUNY, and The University of Texas at Dallas.

[13] Balakrishnan, R., and T. Gruca. 2008. Cost stickiness and core competency: A note. Contemporary Accounting Research

[14]   Baumgarten D., Bonenkamp U., C. Homburg. 2010. The Information Content of the SG&A Ratio. Journal of Management Accounting Research. Vol. 22, pp. 1-22

[15]   Chen C. X., Lu H., Soughiannis T., 2012, The Agency Problem, Corporate Governance, and the Asymmetrical Behavior of Selling, General, and Administrative Costs, Contemporary Accounting Research, pp. 252-282

[16]   Calleja K, Steliaros M, Thomas D. A Note on Cost Stickiness: Some International Comparisons, Management Accounting Research 2006; 17(2): 127- 140

[17]   Chen, C. X., Gores, T., Nasev, J. (2013). Managerial Overconfidence and Cost Stickiness Working Paper, Available at SSRN: http://ssrn.com/abstract=2208622.

[18]   Dierynck B., W. R. Landsman. 2012. Do Managerial Incentives Drive Cost Behavior? Evidence about the Role of the Zero Earnings Benchmark for Labor Cost Behavior in Private Belgian Firms , The Accounting Review, Vol. 87, No. 4, pp. 1219-1246

[19]   Kama, I., and D. Weiss. 2013. Do earnings targets and managerial incentives affect sticky costs?, Journal of Accounting Research 51 (1): 201–24.

[20]   Noreen, E. and N. Soderstrom. (1997) The accuracy of proportional cost models: Evidence from Hospital Service Departments. Review of Accounting Studies. 2: 89-114.

[21]   Suberamaniam C.,weidenmier M., 2003 , "Additional evidence on the sticky behavior of costs" , working paper , Texas Christian university.

[22]   Yasu kata, K., & Kajiwara, T. (2011). Are "Sticky Costs" the Result of Deliberate Decision of Managers?" , available at: http://ssrn.com.

[23]   Demerjian, P., B. Lev, and S. MacVay. (2012) Quantifying managerial ability: A new measure and validity test. Management Science 58(7): 1229-1248.