

Investigating the effect of pricing system changes on financial performance with emphasis on environmental uncertainty

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Abstract

The aim of this study is investigating the effect of pricing system changes on financial performance with emphasis on environmental uncertainty. Sample of study are all accepted companies in the Stock Exchange of Tehran in 2014. Results showed that changes in the pricing system have a negative impact on corporate financial performance. So, it is recommended to the managers and owners of companies, for enhancing and improving the financial performance of company, to use a stable and sustainable pricing system, and along with economical and environmental changes, to have little changes. When the environmental uncertainty is higher, the effect of changes and pricing systems will be more. So it is suggested to managers and other consumers when environmental uncertainty is high, they should consider negative effects of pricing system on corporate financial performance.

Keywords: pricing system changes, financial performance, environmental uncertainty.

Introduction

Undoubtedly, in today's global economy conditions, survival of service institutions and firms is dependent on equipping with strategic cost management system and production of goods and services with competitive prices and quick response to opportunities. Service institutions to continue their economic life must inevitably decrease the cost of capitals and their focus should be on customers, and will move well-proportioned.

Several reasons have been caused changes in management accounting, these changes can be made due to improved efficiency and effectiveness, or because of the obligatory mechanisms (Malmi, 1999). However, according to final feedback from changes it is expected that management accounting changes (MAC) cause to the improvement of company's performance (Arnold, Merchant & Otle, 2006). Unfortunately, the effects of management accounting change or any kind of informational systems (ISC) on corporate financial performance, is not straight. In fact, empirical evidence in this field, is different and ambiguous (Jänkälä & Silvola, 2012; Maiga & Jacobs, 2008; Rom & Rohde, 2007). In some researches, the impact of management accounting changes on the company's financial performance is reported positive, while the impact of these changes have been reported negative in some other studies.

The definition of variables

Firm financial performance: The entity's financial performance, including efficiency of resources is controlled by the entity. Information about the financial performance is presented in the case of income statement and comprehensive income statement (Accounting Standard No. 6 Iran).

Changes in the pricing system: it means the use of one pricing system instead of another pricing system, such as using a pricing system based on objectives rather than cost-based pricing systems (Malmi, 1999).

Environmental uncertainty: uncertainty is one aspect of the external environment which is created in three positions: 1) Lack of information about the environmental factors which is associated with the decision making situations. 2) The inability to determine the probability with any degree of certainty about how environmental factors can affect the success or failure of decision making units of that organization. 3) Lack of information about the costs associated with a decision or improper activity. Many researchers have shown that aspects of environmental certainty and uncertainty aren't one dimension of the environment, and it's the decision makers' understanding from the information related to the environment, so it is called environmental uncertainty (Rezvani & Sahamkhadam, 2012).

Literature review

Garay and Gonzalez (2008) examined the relationship between corporate governance and firm performance evaluation criteria such as percentage of profit division, proportion of P/B, (Market value to the value of firm shares) and Q Tobin in Venezuela Stock Exchange. The results showed that the percentage of increase in the index of Corporate Governance cause to 11.3 percent increase in the percentage of profit division, 9.9 percent increase in the proportion of P/B, and 2.7 percent increase in Q Tobin.

Dipankarghesh and Laurie Olsen (2009), in relation to environmental uncertainty and accruals were conducting an investigation. In their study, they tested whether under conditions of high uncertainty that profits are unmanaged they have more variability, managers use their authority in recognition of accruals and use them to reduce fluctuations. Results showed a positive relationship between unmanaged profits and environmental uncertainty. The results showed that the variability of unmanaged profits is higher when uncertainty is greater and in conditions of high uncertainty, managers use more discretionary accruals. Also, the difference between the variance of unmanaged profits and reporting profits is significantly higher in conditions of uncertainty.

Arif et al (2013) examined the relationship between accruals and uncertainty. The results showed that, there is a negative and significant relationship between working capital accruals and uncertainty. This negative relationship is more for companies with other cycles of factors and is less for companies with less financial crisis. Working capital accruals are more sensitive than uncertainty in long-term investments.

Larson and Resutek (2013), investigated the role of investor uncertainty in predicting stock returns. The results showed a strong negative relationship between the uncertainty of cash flows and future returns. In addition, a strong positive relationship was found between lack of quality assurance and future stock returns.

Karami and Ghorbanzadeh (1392) studied the effect of compliance principal on information uncertainty. Results showed that how much the correspondence between costs and revenues being more, return fluctuations and errors of predicting profits of per share will be less. A strong correspondence between revenues and costs, leading to a decrease in the uncertainty of the accounting information and also it improves the forecasting and decision making by users of accounting information.

Armat and Dastgir (2013), in a study investigated the relationship between environmental uncertainty and the stock's current output. The results showed that environmental uncertainty creates a lot of fluctuations in profitability and corporate performance and managers to avoid the negative effects of it, using discretionary accruals to smooth their reported profits and smoothed earnings also significantly are related with current output stock.

Ganjavi and Nayebzadeh (1392), in a study entitled "Effect of changes in control systems and management accounting on manufacturing companies organizational performance" by analyzing data from 108 companies that have been collected through questionnaires, concluded that the strategic interests has meaningful effects on organizational capabilities and through organizational capabilities and changes in control systems and management accounting, also, it has effect on organizational performance.

Rezai Dawlatabadi and Mehrazin (1392), in a study entitled "Analysis of management accounting role in creating competitive advantages for organizations in dynamic and changing environments" concluded that using new techniques of management accounting is not only a recommendation and in the current era it is considered as a management tool and fundamental requirement in the competitive business environment.

Research hypotheses

First hypothesis: pricing system changes has a meaningful effect on company’s financial performance.

Second hypothesis: the effects of pricing system changes and company’s financial performance will be stronger, when perceived environmental uncertainty is higher.

First hypothesis: changes in the pricing system have a significant impact on corporate financial performance.

In general, the results show that variable coefficient of pricing system changes was (PSC), -0.165734, which reflects the negative impact of the companies’ pricing system on the financial performance, which is significant due to t-statistic of variable coefficient of the pricing system changes; In other words we can say that there is a significant and negative relationship between the changes in the pricing system and the companies’ financial performance. According the foregoing, it can be considered the second hypothesis can be confirmed at 95% level.

Table 1. The results of the first model estimation

ROA = $\beta_0 + \beta_1 CAC + \beta_2 SIZE + \beta_3 Competition + \beta_4 Leadership + \beta_5 Prospector + \epsilon$				
variable	coefficient	Standard error	t-statistic	probability
C	-0.429907	0.145808	-2.948446	0.0037
PSC	-0.165734	0.061893	-2.677769	0.0076
SIZE	0.029826	0.008255	3.612854	0.0004
Competition	0.030308	0.014763	2.053042	0.0418
Leadership	0.020391	0.023983	0.850214	0.3966
Prospector	-0.020270	0.025064	-0.808740	0.4200
The coefficient of determination	0.207			
Adjusted coefficient of determination	0.187			
Durbin-Watson	2.051			
F statistic	27.5408			
probability (statistics F)	0.0000			

Second hypothesis: the impact of pricing changes on corporate financial performance, when environmental perceived uncertainty is higher, becomes more intense.

In general, the results show that the variable coefficient (PSC * PEU) was 0.046400, which reflects the positive impact of perceived environmental uncertainty on the relationship between changes in the pricing system and the company's financial performance, which is significant according to the statistic t with variable coefficient (PSC * PEU), in other words we can say that the negative relationship between changes in the pricing system and the financial performance of the company, when perceived environmental uncertainty is higher, becomes more intense.

According to the foregoing, it can be considered that the second hypothesis can be confirmed at 95% level.

Table 2. The results of the second model estimation

ROA = $\beta_0 + \beta_1 \text{CAC} + \beta_2 \text{SIZE} + \beta_3 \text{Competition} + \beta_4 \text{Leadership} + \beta_5 \text{Prospector} + \varepsilon$				
variable	coefficient	Standard error	t-statistic	probability
C	-0.459833	0.245143	-1.875771	0.0627
PSC	-0.012469	0.005607	-2.273400	0.0129
PEU	-0.052680	0.019644	-2.681720	0.0075
PSC* PEU	0.046400	0.035927	3.291519	0.0070
SIZE	0.029953	0.008322	3.599411	0.0004
Competition	0.029679	0.014950	1.985156	0.0490
Leadership	0.021226	0.024306	0.873300	0.3839
Prospector	-0.019401	0.025309	-0.766561	0.4446
The coefficient of determination	0.228			
Adjusted coefficient of determination	0.195			
Durbin-Watson	2.107			
F statistic	11.2531			
probability (statistics F)	0.0000			

Conclusion

Findings of the first hypothesis

In general, at 95 percent level of assurance, the results show that there is a negative and meaningful relationship between pricing system and financial performance. The results of this hypothesis are along with the findings of Laitinen (20014), Ganjavi & Nayebzade (2014), and Jalai et al (2012).

According to this hypothesis, it could be argued that changing in pricing system decreases financial performance, for example, when the company changes pricing system from customer-based pricing system to cost-based pricing system. This makes the cost of product to be the main criterion, and less attention will be paid to the quality of products, this decreases the sales' amounts, and therefore decreases companies' financial performance.

Findings of the second hypothesis

According to this hypothesis, it is expected that the relationship between changes in the pricing system and the financial performance of the company increase when perceived environmental uncertainty is higher. In general, at 95 percent level of assurance, the results show that there is a negative and meaningful relationship between changes in pricing system and financial performance, and this negative relationship is more intense when perceived environmental uncertainty is higher. The results of this hypothesis are along with the findings of Laitinen (20014), Armat & Dastgir (2014), and Sadidi & Ebrihimi Dardeh (2012).

Suggestions

The results also suggest that changes in the pricing system has a negative impact on corporate financial performance, so it is recommended to managers and owners; to enhance and improve the company's financial performance, use stable and sustainable pricing systems, with little changes in economical and environmental sections.

The findings also show that, when perceived environmental uncertainty is high, the effects of pricing system will be more; it is recommended to managers and other users, under circumstances where environmental uncertainty is higher, to pay special attention to the negative effects of pricing system changes on the financial performance of companies.

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