

THE RELATIONSHIP BETWEEN FINANCIAL PERFORMANCE AND MARKETING MIX IN CAPITAL MARKET (CASE STUDY: THE SUGAR INDUSTRY COMPANIES OF THE STOCK EXCHANGE IN IRAN)

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Abstract

Financial performance of the Company is one of the most important issues for investors, creditors and company executives. In the current competitive market, the assessment of company financial performance has become a necessity; therefore, investing in marketing activities could not only increase the brand value, but also could promote the financial performance of the company. This study attempted to investigate the relationship between marketing and financial performance by the use of the data of companies accepted in the sugar industry of Tehran Stock Exchange from 2001 to 2015, and the panel data model. In this study, 4P Kotler Marketing Mix Model was used, and the return on assets rate index considered as the financial performance index. The results of the research indicated that the invers u shape (\cappa)) nonlinear relationship is established as the financial performance index of the companies between marketing mix and return on assets. This indicates that at the lower level of the independent variable (marketing mix), the positive effects on the dependent variable (return on assets rate) were more than negative effects, also this relationship is going to be reversed when an independent variable (marketing mix) reached to a certain level. Regarding this conclusion, it can be determined the indices affecting the performance and the optimal level for investing on each of these indices in each industry. Selected indices of this research can be studied in other industries. The results can also be used for different groups like the investor, the stock exchange and members of companies.

Keywords: Marketing, capital market, financial performance, sugar industry.

Introduction

In the current competitive world, organizations require to use marketing techniques and marketing specialist research, to survive (Hanssens et al., 2016). Studies have demonstrated that the failure of companies is a result of their lack of ability to utilize marketing techniques. These companies ignored developments of market, and changes in customer consumption patterns, and they would sell and more profits were preferred to customer satisfaction instead of moving on to advanced marketing. Marketing is a battle at the same time, however it is not a battle with arms, as Albert Emery says regarding this "marketing is a civilized war". companies and organizations succeed to use words, ideas and more favorable intellectual order In most of these battles; In other words, those that have an up to date and consistent marketing management in order to be able to compete with the competition scenes (Constantinides, 2004). According to McCarthy's (1960) definition, marketing mix is a set of marketing tools that companies use to achieve their marketing goals. McCarthy has introduced a four-factor classification of this tool, which is called 4P and its constituent elements are as followings: price, product, promotion, and place.

Marketing literature presents that companies must use their capabilities to convert resources into output, with respect to the marketing mix strategy, and therefore, marketing capabilities are relevant to business performance. Song *et al.* discussed that marketing capability contributes to the structure of the company and maintaining long-term relationships with customers and place channel members. Marketing capability creates a strong image of the brand, which allows companies to access their top performance. Also, The company's performance depends on its leadership, which in turn depends on structural factors (Pattitoni, 2014)

Empirical studies on financial performance of companies have found meaningful relationships between

marketing capabilities and their financial performance. On the other hand, investors, and particularly, stockholders need benchmarks, which can accurately assess the performance of company. The oldest and most important companies' performance evaluation approach must evaluate financial and economic performance; it is often based on financial statements and has value-based metrics. Valuable information about the quality of profitability, earnings per share, the strengths and weaknesses of companies and their financial position are provided using financial analysis (Ghodratiyan & Anvari, 2004). The discussion on factors affecting financial performance and profitability has attracted lots of attention from researchers. Accordingly, Most of these studies are based on the Bain's traditional performanceguidance-structure paradigm (Bain, 1959), which emphasizes on the industry characteristics, such as concentration, scales, and input/output problems (Goddard et al., 2005).

Over the past decades, the researchers' attention has considerably grown to the role of marketing in empowering companies to create sustainable competitive advantage. Recent advances in marketing and financial discussions indicate more empirical evidence of the effects of activities of the specific marketing on company accounting and market financial performance. However, still there is no significant study on the effect of marketing mix on the financial performance; therefore, this study investigated the effect of some elements of marketing mix on financial performance of company. Regarding, the information of members of the sugar industry of Tehran Stock Exchange has been used. It is essential to explain that the sugar industry in the stock market has a history full of ups and downs. In the post-war years and especially during the stock exchange flourishing in the mid-1990s, the stock of manufacturing company was attracted by investors, because of the growth of domestic demand. The most of the sugar companies became Stock Exchange members from 1996 to 2001. Along with the growth of imports and the stabilization of prices in these years, the production trend of these companies declined. By passing 10 years, the industry faced a critical situation in the years 2006 and 2007, due to the significant growth of imports and the application of government-priced policies. Regarding, about 2.5 million tons of sugar in 2006 and 1.2 million tons in 2007 were entered to the country; while domestic production capacity was in the region of 1.2 million tons per year and the annual consumption was 2.2 million tons. Therefore, the domestic sugar production fell to 230 thousand tons in 2008, while imports remained at a significant level of 1.8 million tons. Nevertheless, since 2010, the market conditions changed in favor of these companies as the exchange rate and import tariff increased; due to the reason that the price of sugar imports has risen consistent with the currency jump, and consequently domestic producers have gained their competitive power again. The prospect has resulted in investors investing in shares of sugar companies in the stock exchange. Their stock prices will increase along with the increasing of the expectations of future profitability. In 2015, a record for sugar production in the country was broken (Saman Bank Brokerage Company, 2016). As a result, the sugar industry is considered as one of the most troubled and worst-tied industries in Tehran Stock Exchange.

Theoretical Foundations and Literature Review

In the literature review of strategic management, the determining factors of the company's performance are in association with the company's internal resources. With respect to a resource-based view, the most important determinants factors of performance are the resources, which are available in the company (such as total assets, capital, organizational processes, information, knowledge, etc. (Wernerfelt, 1984) moreover, at the same time, it may be helpful to implement some strategies for enhancing the operational effectiveness and efficiency of the companies (Daft, 1983; Barney, 1991). Several studies have already been accomplished to examine the factors, which have influences on the performance and profitability of companies, including economic, financial, accounting and management factors (Demirgunes, 2016), and particularly identifying the effect of the company's marketing activities on its profitability and performance was not considered by the researchers.

On the other hand, marketing is investigating the most appropriate market and the areas that an organization can deploy more effectively and efficiently. Marketing is defined as a set of commercial activities, which conveys the flow of goods or services from production to final consumers of guidance (Fakhimi *et al.*, 2011).

In recent years, the discussion about marketing and its role in improving the performance of companies has been deeply taken into account. Accordingly, one of the reasons is extensive advertising and marketing costs. Despite the importance of marketing and advertising to increase sales, assessing its effects is not easy. The reason is that marketing is a complex process and marketing performance is completely depend on customer responses. Many managers look at marketing merely as a cost, while not only investing in marketing results in the brand value increasing, but also it has been proven that using marketing leads to the risk of investment, (Srinivasan *et al.*, 2005; Pauwels *et al.* 2004 and Kim 2007) in their research indicated that, marketing costs have a positive and significant effect on sales. Micha (2014)

also demonstrated that there is a positive and significant relationship between advertising intensity and profitability. Larsen et al. (2003) measured the relationship between marketing intensity and margin of profit, and the result of their research confirms a positive and significant relationship between these two variables. Vlachevi et al. (2000) measured the relationship between the intensity of marketing and sales costs with profit margin and used explanatory variables for market share, risk changes and sales growth in their regression model, and their results indicated that sales intensity and marketing costs results in profitability increasing, and then profitability declining. In other words, there is a quadratic (share) relationship between the intensity of marketing costs and the profit margin of that. Also, the relationship between the components of the marketing mix with the financial performance of the companies is investigated in the following.

With respect to the importance of using marketing mix on financial and economic performance of companies, a comprehensive review of factors, which have influences on the financial performance with emphasis on marketing factors is necessary. Therefore, in this study, the effect of marketing mix on the financial and economic performance of the sugar companies of the member of Sugar Industries Companies in the form of 4p model were studied. Regarding, the variables of inflation rate, company size, exchange rate (official) as environmental variables, variable rate of return on assets as a measure of financial performance (dependent variable) and 4mixes include product mix, prices mix, promotions mix and place mix are also considered as independent variables.

Materials and Methods

With respect to the purpose of this study, the marketing mix effect on financial performance of companies, 26 companies from the Iranian sugar industry companies of the selected stock market and overseas market have been selected using a systematic elimination method from the statistical population. A sample included all the companies in the statistical population that meets the following criteria:

- 1. They should have no changes in the financial period during the research time.
- 2. The required data for the research variables should belongs to the duration of 2001-2015.
- 3. Their financial period is up to last day of last month of that year, therefore data can be combined with each other and if it is required, it will be in panel form.

Regarding the specified criteria and conditions, 20 companies were selected out of 26 available companies. Their financial performances were collected along with marketing mix data for the period of 2001-2015 annually, hence the research methodology according to the nature of the data is as panel data, and there are several approaches for determining the appropriate method to combine data analysis. The common approach is for using the Chow test to apply combined data and homogeneous diagnosis or heterogeneity of them. If the results of this test are based on the use of data in the form of panel data, one of the models of fixed effects model (FEM) or random effects model (REM) should be used to estimate the research model. Hausman test should be performed to select one of these two models, due to the reason that the regression and correlation techniques are

required to find the relationships between the variables of the research.

Models and research variables

The following model is used to test the first hypothesis of the research:

ROA_{i,t} =
$$\beta_0 + \beta_1 P1_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INF_t + \beta_4 DOLL_t + \epsilon_{i,t}$$

The following model is used to test the second hypothesis of the research:

ROA_{i,t} =
$$\beta_0 + \beta_1 P2_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INF_t + \beta_4 DOLL_t + \varepsilon_{i,t}$$

The following model is used to test the third hypothesis of the research:

$$ROA_{i,t} = \beta_0 + \beta_1 P3_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INF_t + \beta_4 DOLL_t + \epsilon_{i,t}$$

The following model is used to test the fourth hypothesis of the research:

$$ROA_{i,t} = \beta_0 + \beta_1 \; P4_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INF_t + \beta_4 DOLL_t + \epsilon_{i,t}$$
 In which:

The dependent variable:

ROA $_{i,t}$ = Return on assets of the company i in the t year The independent variables:

 $P1_{i,t}$ = the product mix of company I in t year

P2_{i, t}= the price mix of company I in t year

P3_{i, t}=the promotion mix of company I in t year

P4_{i,t}=the place mix of company I in t year

Selected environmental variables:

SIZE it = the size of company I in t year

INF $_{\rm t}$ = the inflation rate of the country I in t year

DOLL _t = the currency rate (dollar) at t year, It should be noted that each of the four mixes selected according to the information contained in the financial statements and activity

reports of selected companies during the period under review.

At first, the method of estimating each of the selected indicators was indicated in Table 1.

Table 1: How to calculate the marketing mix indexes of the research

Row	Index	Calculation method
1	Price	The final cost of the sold goods
2	Product	Sales volume of the product
3	Promotion	The difference between the market price and the stock price
4	Place	The ratio of distribution and sales costs to sales

Results and Discussion

In the following, the Durbin-Watson test for the four presented models in Table 2 is presented. According to the results presented in Table 2, since the Durbin-Watson statistics of all four models are between 1.5 and 2.5, so there is no correlation problem in the estimation models.

Table 2: The incompatibility test of disrupted sentences

Model	Durbin-Watson statistics
First	1.979
Second	1.971
Third	1.978
Fourth	1.994

The multiple synchronization intensity was evaluated using Variance Inflation Factor (VIF) in ordinary least squares regression analysis. Regarding the results, since the values of VIF of inflation are less than five for all variables in each of the four models, there is no problem for coherence.

Table 3 : Descriptive statistics of research variables

Index	Inflation rate	Currency rate	Company size	return on assets rate	Product mix	Price mix	Promotion mix	Distribution mix
Mean	15.58	16.08	15.33	9.12	19.67	15.38	0.43	4.89
Standard deviation	5.39	5.67	6.29	3.18	7.54	5.26	0.68	1.55
Skewness	0.29	0.35	0.44	0.30	0.28	0.43	0.70	0.43
Stretch	0.32	0.41	0.98	3.69	0.32	0.98	5.23	5.57
(J-B) Statistics	7.31	4.68	4.78	8.54	10.77	6.98	6.77	5.25
Significance level	0.07	0.11	0.088	0.091	0.00	0.02	0.00	0.01

Table 4 : Multiple Linear Testing in Models

Model	Variable	Inflation variance
		Factor
	Product mix	2.946
	Squared product mix	2.132
First	Company size	1.078
	Country inflation rate	1.06
	Official exchange rate (dollars)	1.068
	Price mix	1.233
	Squared price mix	1.36
second	Company size	1.116
	Country inflation rate	1.063
	Squared product mix	1.068
	Promotion mix	2.189
	Squared promotion mix	1.97
Third	Company size	1.644
	Country inflation rate	1.06
	Squared product mix	1.066
	place mix	1.023
	Squared place mix	1.057
Forth	Company size	1.032
	Country inflation rate	1.061
	Squared product mix	1.062

The static evaluation of the variables was also performed by the use of (IPS) im, peseran and Shin test. As shown in Table 5, all variables are valid.

Table 5: IPS test for static variables

Research variables	t- statistic	Sig level
Return on assets	-6.466	0.000
Product mix	-6.896	0.000
Price mix	-3.429	0.011
Promotion mix	-5.833	0.000
place mix	-6.11	0.000
Company size	-7.66	0.000
Inflation	-2.85	0.000
Exchange rate	1.59	1.000

The Limmer F test was used to determine the type of combination or panel data, and the results of them are as followings:

Table 6: The results of Limmer F test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.97	(9,234)	0.6533

According to these tables, the F test and the p-value of this hypothesis reject the existence of constant effects against the Pooled state. In other words, since the significance level (Prob.) in the F-test is more than 0.05, the zero hypothesis cannot be refused so the effects of the regression model are redundant at 5% (and 10%), therefore the estimation of the model is preferred in the form of Pooled data to estimate the model as panel data with constant effects.

We present the results of model estimation after reviewing the qualitative characteristics of the variables and research models. The result of the first hypothesis of the present study are presented in the form of the first model, in Table 7.

Table 7: Examining the first hypothesis (dependent variable: assets retur: return on assets)

Variable	Coefficients	Standard error	t-statistic	Sig level
Fixed value	0.62	0.049	12.626	0.000
Product mix	0.309	0.041	7.531	0.000
Squared product mix	-0.501	0.019	-25.68	0.000
Company size	-0029	0.002	-11.861	0.000
Inflation rate of country	-0.947	0.13	-7.273	0.000
Exchange rate (dollar)	0.523	0.055	9.48	0.000
f- statistic		21.419	Determining factor	0.635
Sig level of f- statist	ic	0.000	Adjusted determining factor	0.61

According to the results of Table 7, there is a significant and direct relationship between the product mix and the return on assets, since the t-test statistic of a product is more than + 1.965 and its significance level is less than 0.05. On the other hand, where the t-test variable of the product mix is more than 1.965 and its significance level is less than 0.05, there is a significant and reciprocal relationship between the product mix and return on assets. It indicates that at the lower level of the independent variable (product mix), its positive effects on the dependent variable (return on assets rate) are more than its negative effects, and this relationship is reversed after the independent variable (product mix) reaches to a certain level, and the product mix is also included in the table . Also, there is a relationship between the inverse versus (\cap) between the product mix and the return on assets, due to the fact that the mix product variable is positive and the coefficient of the component of the product mix is negative. Therefore, the first hypothesis of this study is confirmed.

This type of relationship between the product index and return on assets in Concours and Young's (2011) research,

which was conducted on 15 restaurants in the United States from 2001 to 2008, is also concluded.

It is notable that the control variables of the company size and the inflation rate have a reverse and significant relationship with the dependent variable, and also the control variable of the official exchange rate (Dollar) has a direct and significant relationship with the dependent variable. Meanwhile, the significance level of the F statistic is also 0/00, which is below 0/05 and indicates the significance of the model. Another noteworthy point in the above table is the modification coefficient of the model. The adjusted coefficient of modification of the used model is about 61%, which indicates that independent and controlled variables could explain approximately 61% of the dependent variable, which is an acceptable value.

Test result of second hypothesis of the present study, presented in the form of the second model, is shown in Table 8.

Table &	Testing the second	hypothesis (dependent	variable: : return on assets)
Lable 5:	t resume the second	nybolnesis taebenaeni	variable: : return on assets)

Variable	Coefficients	Standard error	t-statistic	Sig level
Fixed value	0.617	0.068	8.972	0.000
Price mix	0.12	0.017	6.857	0.000
Squared Price mix	-0.164	0.025	-6.424	0.000
Company size	225	0.043	-5.189	0.000
Inflation rate of country	-0.889	0.126	-7.012	0.000
Exchange rate (dollar)	0.432	0.063	6.771	0.000
f- statistic		21.294	Determining factor	0.632
Sig level of f- statis	tic	0.000	Adjusted determining factor	0.607

According to the results of Table 8, since the t-test statistic of a price is more than + 1.965 and its significance level is less than 0.05, there is a significant and direct relationship between the price mix and the return on assets n. On the other hand, where the t-test variable of the price mix is more than -1.965 and its significance level is less than 0.05, there is a significant and reciprocal relationship between the price mix and return on assets. It presents that at the lower level of the independent variable (price mix), its positive effects on the dependent variable (return on assets rate) are more than its negative effects, and after the independent variable (price mix) reaches a certain level, this relationship is reversed, and the price mix is also included in the table. Also, there is a relationship between the inverse versus (\cap) between the price mix and the return on assets, due to the fact that the price mix variable is positive and the coefficient of the squared price mix is negative. Therefore, the second hypothesis of this study is confirmed.

It is notable that the control variables of the company size and the inflation rate have a reverse and significant relationship with the dependent variable, and also the control variable of the official exchange rate (Dollar) has a direct and significant relationship with the dependent variable. Meanwhile, the significance level of the F statistic is also 0/00, which is less than 0/05 and indicates the significance of the model. Another noteworthy point in the above table is the adjusted coefficient of the model. The adjusted coefficient of the used model is about 60%, which indicates that independent and controlled variables could explain about 60% of the dependent variable, which is an acceptable value.

Test result of third hypothesis of the present study, presented in the form of the third model, is shown in Table 9.

Table 9 : Examining the third hypothesis (dependent variable: : return on assets)

Variable	Coefficients	Standard error	t-statistic	Sig level
Fixed value	0.389	0.077	5.001	0.000
Promotion mix	0.631	0.066	9.543	0.000
Squared Promotion mix	-0.311	0.015	-20.236	0.000
Company size	-0.011	0.003	-3.246	0.001
Inflation rate of country	-0.722	0.146	-4.933	0.000
Exchange rate (dollar)	0.543	0.057	9.517	0.000
f- statistic		27.27	Determining factor	0.651
Sig level of f- statis	tic	0.000	Adjusted determining factor	0.635

According to the results of Table 9, there is a significant and direct relationship between the promotion mix and the return on assets, since the t-test statistic of a promotion is more than + 1.965 and its significance level is less than 0.05.On the other hand, where the t-test variable of the promotion mix is more than -1.965 and its significance level is less than 0.05, there is a significant and reciprocal relationship between the promotion mix and return on assets. It indicates that at the lower level of the independent variable (promotion mix), its positive effects on the dependent variable (return on assets rate) are more than its negative effects, and this relationship is reversed after the independent variable (promotion mix) reaches to a certain level, and the price mix is also included in the table. Also, there is a relationship between the inverse versus (1) between the promotion mix and the return on assets, due to the fact that the promotion mix variable is positive and the coefficient of the squared promotion mix is negative. Therefore, the third hypothesis of this study is confirmed.

It is notable that the control variables of the company size and the inflation rate have a reverse and significant relationship with the dependent variable, and the control variable of the official exchange rate (Dollar) has a direct and significant relationship with the dependent variable. Meanwhile, the significance level of the F statistic is also 0/00, which is less than 0/05 and indicates the significance of the model. Another noteworthy point in the above table is the adjusted coefficient of the model. The adjusted coefficient of the used model is about 63%, which shows that independent and controlled variables could explain about 63% of the dependent variable, which is an acceptable value.

Test result of fourth hypothesis of the present study, presented in the form of the third model, is shown in Table 10.

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Variable	Coefficients	Standard error	t-statistic	Sig level
Fixed value	0.736	0.054	13.548	0.000
Place mix	0.106	0.038	2.77	0.006
Squared Place mix	-0.038	0.01	-3.544	0.000
Company size	-0.038	0.002	-16.348	0.001
Inflation rate of country	-0.123	0.286	-4.323	0.001
Exchange rate (dollar)	0.175	0.072	2.433	0.016
f- statistic		18.833	Determining factor	0.513
Sig level of f- statis	stic	0.000	Adjusted determining factor	0.457

Table 10: Examining the fourth hypothesis (dependent variable: return on assets)

According to the results of Table 10, since the t-test statistic of a place is more than + 1.965 and its significance level is less than 0.05, there is a significant and direct relationship between the distribution mix and the return on assets. On the other hand, there is a significant and reciprocal relationship between the place mix and return on assets, where the t-test variable of the place mix is more than -1.965 and its significance level is less than 0.05. It means that at the lower level of the independent variable (place mix), its positive effects on the dependent variable (return on assets rate) are more than its negative effects, and this relationship is reversed after the independent variable (place mix) reaches to a certain level, and the price mix is also included in the table. Also, there is an inverse u shape relationship (∩) between the place mix and the return on assets, due to the fact that the place mix variable is positive and the coefficient of the squared promotion mix is negative. Therefore, the third of fourth of this study is confirmed.

It is notable that the control variables of the company size and the inflation rate have a reverse and significant relationship with the dependent variable, and the control variable of the official exchange rate (Dollar) has a direct and significant relationship with the dependent variable. Meanwhile, the significance level of the F statistic is also 0/00, which is less than 0/05 and indicates the significance of the model. Another noteworthy point in the above table is the adjusted coefficient of the model. The adjusted coefficient of the used model is about 47%, which shows that the independent and controlled variables could explain about 47% of the dependent variable, which is an acceptable value.

Conclusion

Marketing mix is a set of marketing tools that companies use to achieve their marketing goals. In this study, the relationship between marketing mix and financial performance of sugar industry companies' members of Stock Exchange Organization was investigated. In this regard, the data of companies accepted in the sugar industry of Tehran Stock Exchange from 2001 to 2015 were used in the form of data panel model. The results of the research demonstrated that the relationship of (\cap) between the marketing mix and the return on assets is established. Marketing costs to a certain extent will improve the return on assets and will also increase the profitability of the company's operations. However, at a certain level, the increase in marketing costs will be accompanied by weakening of the company's financial performance; this means that the optimal level of the mixing elements of the marketing can be determined and by investing on each index, by considering this kind of relationship, , and it has taken steps to improve financial performance. The lack of awareness of the effective indices in the marketing process of a company can result in weaknesses of the financial performance and company Therefore, identifying effective mixes performance enhancement and efforts to strengthen and modify them will help to improve the financial performance of the company. In this regard, researchers and professors interested in the field of marketing are advised to select the other performance measurements such as Kyoto Bin index, economic value added and equity returns, and evaluate the relationship between them and the different models of marketing mix in their future studies. It is also suggested that in future studies, the relationship of this research to the level of other industries, such as the automotive industry and components be also investigated.

References

Bain, J. B. (1959). Industrial Organization. NY, USA: John Wiley & Sons Publications.

Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1): 99-120.

Constantinides, E.(2004). Influencing the online consumer's behavior. Internet Research, 14 (2): 111-126.

Daft, R.L. (1983). Organization Theory and Design. New York, USA: West Publishing.

Demirgüneş, K. (2016). The Effect of Liquidity on Financial Performance: Evidence from Turkish Retail Industry. International Journal of Economics and Finance, 8(4): 63-79.

Fakhimi, A.; Akbari, S. and Rasooli, R. (2011), "Investigating the effect of marketing mix on increasing sales of water heaters in Qianar Khazar Company", Beyond Management, 4 (16): 79-106.

Ghodratyiyan, K. and Anvari, A.S. (2004), "Designing A Performance Evaluation Community Model And Ranking of Companies" Manage Special Issue, No. 36, pages 109 to 134

Hanssens, D.M.; Wangb, F. and Zhangc, X. (2016). Performance growth and opportunistic marketing spending. International Journal of Research in Marketing, 33(4): 711–724.

Kim, K. (2007). The Effects of Advertising and Publicity on Corporate Reputation and Sales Revenue: 1985-2005. Dissertation Presented to the Faculty of the Graduate School of University of Texas at Austin for PH.D.

Larsen, T.; Sirini, A. and S. Sirnivasan (2003). Advertising Intensity and R&D Intensity: Differences Across Industries and Their Impact on Firm's Performances.

- International Journal of Business and Economies, 2(2): 167-176.
- Pattitoni, P.; Petracci, B. and Spisni, M. (2014). Determinants of profitability in the EU-15 area. Applied Financial Economics, 24(11): 763-775.
- Wernerfelt, B. (1984). A Resource-based view of the firm. Strategic Management Journal, 5(2): 171-180.
- Pauwels, K. and Silva–Risso, J.; Srinivasan, S. and Hanssens, D.M. (2004). New Products, Sales Promotion and Firm
- Value: The Case of Automobile Industry. Journal of Marketing, 142-156.
- Saman Bank Brokerage Company (2016), "Overview of sugar industry and company", http://www.boursenews.ir.
- Vlachvei, A.; Ananiadis, I. and Oustapassidis, K. (2000). Selling Expenses and Profit Margin: In Greek Wine Industry. Investigaciones Europeas de Direccion y Economia de la Empresa, 6(1): 93-100.