



The Study of Relationship between Profitability Ratio and Critical Success Factors in Active Companies in FMCG Industry of Tehran Stock Exchange

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ABSTRACT: The aim of the present study is determining the relationship between profitability ratio and critical success factors in active companies in FMCG industry of Tehran. The research type is survey instrument and research population are consisted of shopkeepers and consumers of FMCG companies. The sample size according to Morgan table is 195 for shopkeepers and 400 for consumers. The tool of this research is questionnaire of companies' critical success factors. We consult thesis and consulting advisor and also experts to evaluate questionnaires' validity. We used Cronbach's Alpha model to evaluate questionnaires' reliability. The Cronbach's Alpha coefficient was earned 0.73 in questionnaires', therefore the mentioned questionnaires could be said to have enough validity and reliability. The results show that there is a meaningful relationship between profitability ratio and critical success factors in FMCG industry in stock exchange.

Keywords: Critical Success Factors, Profitability Ratio, FMCG Industry, Stock Exchange

ORIGINAL ARTICLE

INTRODUCTION

The concept of capital maintenance is concerned with the definition of the capital that entity tries to maintain. This concept establishes the relationship between capital and profit concepts; because it defines a sign that entity is evaluated by it. Capital maintenance concept requires the distinction between return on capital and capital turnover of an entity. This is due to the fact that only inflows of assets in excess of amounts of assets needed to maintain capital may be regarded as profit of the entity and as a result they are considered as return on capital of the entity (Taghavi, 1999).

Accounting profit requires recognition of realized period income relevant to cost of earnings of that same period. In fact, some of the costs are period costs which are allocated to income and other costs are allocated to the next period and it is assumed that period cost are matched with period income (Riahi Balkooyi, 2002).

Investors, creditors, shareholders often consider market price of common shares and number of ratios/shares that evaluate company's status with respect to the market (Dastgir, 2004) Usually there are barriers to realization of strategic goals. Some of these barriers play an important role in achieving hidden benefits in the opportunity given to the company; however, resolving these barriers is hard and complicated. These barriers determine organization's success. A strategic solution should resolve these barriers and provide the organization with intended profits. Recognition of these factors is performed by "Bottleneck Analysis". Thus, bottleneck

analysis and determining key success factors is a process that can be used for practicing analytical models (Mahdavi, Bayati and Rasti, 2008).

Hosseini et al. (2007) in a research titled as "creating competitive advantage in the industry with the approach of key success factors in Iranian tile industry" used domestic resources cost measure and studied relative advantage of Iran in tile industry. They used DEMATEL technique and identified and prioritized factors affecting competitive factors of the companies in tile industry. The results of this research showed that following issues should be prioritized respectively: paying attention to manufacturing quality and providing customer service, quick response to market changes and quick and correct assessment of the market and the manufacture of different products.

Rahnavard et al. (2009) in a research titled as "success key factors of knowledge management system in colleges and high education centers in Tehran" studied key success factors of knowledge management systems and prioritized them respectively as follows: human resources development, knowledge-oriented strategic orientation, information systems infrastructure, participatory culture, Benchmarking, knowledge evaluation and transfer, and individuals' involvement.

Mac Milian (2001) in a research titled as "predictability of stock returns using nonlinear models" showed that there is a nonlinear relationship between return rates and external performance evaluation criteria (such as profit, return on assets and return on shareholders' equity).

Valentine et al. (2006) in a research titled as “the relationship between financial leverage changes and stock value” showed that there is an inverse and significant relationship between financial leverage changes and adjusted simultaneous returns (current returns) with respect to the risk as well as adjusted immediate returns with respect to the risk. Moreover, findings of this research implicitly showed that there is a relationship between changes in returns of shareholders’ equity and current stock returns.

MATERIALS AND METHODS

This research is a descriptive-correlated study based on research objective because it deals with correlation between two variables. This research is also a quantitative research based on data type because quantitative data and analyses are used in this research. Moreover, this research is a survey research based on research methodology. This research not only used a survey to determine the profitability ratio of firms, but it is also used content analysis of financial documents. In this study, profitability ratio was considered as dependent variable while key success factors are considered as independent variable. This study included two statistical populations. The first population consisted of shop owners while the second population included consumers of FMCG companies. The number of shop owner’s individuals was 896 individuals while the number of consumers’ individuals was around 200,000

individuals. According to number of shop owner’s individuals and consumers’ individuals and the issue that proportion of these numbers varies in population; therefore, stratified random sampling method was used in this research. Thus, the sample was selected proportionally to shop owner’s individuals and consumers’ individuals in statistical population. Morgan table (1970) was used in order to determine the number of sample’s individuals (size of the sample). Due to statistical size of 896 shop owners’ individuals and 200,000 consumers’ individuals, least sample size was equal to 195 shop owners’ individuals and 400 consumers’ individuals according to the scale.

In this study, a questionnaire (companies’ key success factors) was used.

Companies’ Key Success Factors Questionnaire

The questionnaire consisted of 5 factors and 16 items which were classified in terms of Likert 3 item Scale. The questions (1, 2, 3, 4, and 5) measured the quality, questions (6, 7, 8, 9, and 10) measured advertisement cause, questions (11 and 12) measured competitive price, questions (13 and 14) measured distribution network and questions (15 and 16) measured sales force. Cronbach's alpha method was used to determine reliability of the questionnaire. Cronbach's alpha coefficient of the questionnaire was obtained 0.73; therefore, it can be said that this questionnaire is adequately reliable.

RESULTS

Table 1. Results of frequency distribution with respect to statistical sample (shop owners)

Statistical sample	Frequency	percent
Shop owners	195	32
Total sum of statistical sample	595	100

Table 2. Results of frequency distribution with respect to statistical sample (consumers).

Statistical sample	Gender	frequency	percent
Consumers	Female	320	80
	Male	80	20
	Total sum of consumers	400	100
Total sum of statistical sample		595	68

Table 3. Results of frequency distribution with respect to consumers’ level of education

Level of education	Frequency	Percent
Under diploma	129	32
Diploma	211	52
Diploma of higher education and bachelor	48	12
Master and higher than master degree	12	4
Total sum	400	100

Findings of table 1 indicate that 195 individuals of statistical sample (32%) are from shop owners’

individuals. Results of table 2 indicate that 400 individuals (68%) of statistical sample are from

consumers' individuals. Results of table 3 indicate that 32% of consumers have under diploma level of education, 52% have diploma level of education, 12%

have diploma of higher education and bachelor level of education and 4% of managers have master and higher than master level of education.

Table 4. Correlation matrix of study variables and profitability ratio

Variables	Profitability ratio	Level of significance
Product quality	0.64	0.02
Company's effective advertisement	0.60	0.03
Competitive price	0.72	0.02
Good distribution network	0.70	0.01
company's sales force skill	0.65	0.01
key success factors	0.71	0.01

Table 4 indicates that correlation coefficient, i.e. the relationship between product quality and profitability ratio, is equal to $r=0.64$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between product quality and profitability ratio. This table indicates that correlation coefficient, i.e. the relationship between company's effective advertisement and profitability ratio, is equal to $r=0.60$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between company's effective advertisement and profitability ratio. This table indicates that correlation coefficient, i.e. the relationship between competitive price and profitability ratio, is equal to $r=0.72$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between competitive price and profitability ratio. This

table indicates that correlation coefficient, i.e. the relationship between good distribution network and profitability ratio, is equal to $r=0.70$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between company's good distribution network and profitability ratio. This table indicates that correlation coefficient, i.e. the relationship between company's sales force skill and profitability ratio, is equal to $r=0.65$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between company's sales force skill and profitability ratio. This table indicates that correlation coefficient, i.e. the relationship between key success factors and profitability ratio, is equal to $r=0.71$. Thus, this relationship is significant at 95% level of significance ($P>0.05$). Then, null hypothesis is rejected. In other words, there is a positive and significant relationship between key success factors and profitability ratio.

Table 5. Results of significant difference test of attitudes of shop owners and consumers about key success factors in FMCG industry

Key success factors	Relative frequency percent (shop owners)	Relative frequency percent (consumers)	Difference between two groups (D)	Z statistic value	Level of significance
High	53	50	3	1.29	0.02
Average	37	38	1		
Low	10	12	2		
Total	100	100			

According to above table 5, since D value (attitudes' difference) is positive and z statistic value is higher than 1.65 and it is significant, then it can be concluded that there is a significant difference between attitudes of consumers and shop owners about key success factors in FMCG industry. Fridman scoring method is used in order to determine that the attitudes' difference between shop owners and consumers include which one of the key success factors (or to determine which one of the key success factors make a significant difference between

attitudes of shop owners and consumers about key success factors).

The results of dimensions'/factors' scoring showed that competitive price factor has the highest score and sales force skill factor has the lowest score among other factors. According to the fact that level of significance is lower than 0.01, it can be said that H_1 hypothesis is accepted at 99% level of significance. In other words, there is a significant difference between key success factors from shop owners' points of views.

Table 6. Scoring of key success factors from consumers' point of views

Priority	Key success factors	Mean score	Standard deviation
1	Competitive price	41.3	45.0
2	Good distribution network	33.3	20.5
3	advertisement	30.3	26.0
4	Product quality	27.3	53.0
5	Sales force skill	20.3	62.0

Table 7. Significant test of Fridman test

Statistical indexes	Calculated values
χ^2	27.36
Degree of freedom	4
Level of significance	0.02

DISCUSSION

The expression of a direct relationship in this assumption means that by increasing or decreasing profitability ratio, product quality will increase or decrease. Customer satisfaction and product quality concepts are highly correlated with organization's service concept. Increasing company's product quality results in customer satisfaction. As a result customer satisfaction increases tolerance threshold for paying higher price in exchange for required product. This reduces the labor force withdrawal and replacement. In addition, it causes employees' job satisfaction and improves work ethic. It also highly raises customer satisfaction. Therefore, it can be concluded that increasing the quality of products has a huge impact on increasing profitability.

The advertisement is the most important behavioral variable affecting the structure and function of the markets. The advertisement, with changing consumer preferences, could affect economic variables. It can also increase concentration and prevent other competitors to enter to the market. On the other hand, it can reduce concentration and facilitate entrance to the market. The purpose of economic firms from advertising is gaining economic profits. The advertisement changes consumer's preferences and makes consumers more willing to buy advertised goods than unadvertised goods. Thus, it can be concluded that advertisement directly and significantly affects profits of advertiser institution.

Applicable evidences showed that demand susceptibility to change prices is higher than demand susceptibility to change other costs like advertisement for most of the products. Price effect on level of sale is more visible than its effect on other competitive fields. For this reason, mismatch risk reduces in decision making. In other words, if the time required for the onset of the effect became longer, the probability of mismatch between results and intended targets increases. In inflammatory cases, consumers, especially consumers whose income is fixed, tend to

buy cheaper goods. Market saturation increases the importance of price variable. In these cases, buyers' market turns out to be vendors' market. Then, vendors are forced to adopt aggressive and competitive pricing policies. The globalization of production and trade increases the importance of price variable as well. New firms and products use aggressive pricing strategies to enter to the market and increase their share [of the capital]. Therefore, it can be concluded that competitive price index highly affects profitability level.

Human resource managers and researchers believe that the HR performance plays an important role in organization's performance. In fact, most annual reports of the companies affirm that organization's staffs are the most important assets of the organization. Performance and skills of organization's human resources manage other resources as well (such as basic human skills, employee engagement, culture, team work, etc.). These other resources are likely sources of sustainable competitive advantage in the 21st century (this century).

Organizations can achieve success and prosperity in a competitive environment when they highly consider the environment they are working in and its requirements. They also should develop their strategies according to these requirements. In this regard, key success factors are considered as required factors for the industry. Companies working in an industry should pay attention to key success factors in order to remain and work in that industry. Therefore, from above mentioned materials, it can be concluded that there is highly significant relationship between company's key success factors and their profitability ratios.

REFERENCES

Ashari, N.H., Koh, C., Tan, S.L. & Wong, W.H. (1994). Factors Affecting Income Smoothing Among Listed

- Companies in Singapore. *Accounting and Business Research*, 291-301.
- Berry, L. & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, 60, 31-46.
- Burgstahler, D. & Dichev, I. (1997). Earnings Management to Avoid Earnings Decreases and Losses. *Journal of Accounting and Economics*, 24, 99-126.
- Dastgir, M. (2004). *Financial Management Fundamentals*, Volume 1. Tehran: Noorpardazan Publications.
- Fama, E. & French, K. (1992). The Cross-Section of Expected Stock Returns. *Journal of Finance*, 2, 427-460.
- Gupta, N. (2008). *Advertising and Firms' Performance: An Empirical Analysis*. Ph.D. Dissertation, Go hale Institute of Politics and Economics.
- Henderson, J.C. & Venkatraman, N. (2000). Strategic Alignment: Leveraging Information Technology for Transforming Organisations. *IBM Systems Journal*.
- Hosseini, S.M. & Panahi, M. (2007). Creating competitive advantage in the industry with key success factors approach in tile industry in Iran, *Journal of Business*, winter 2007.
- Lewellen, J. (2003). "Predicting Return with Financial Ratios" At Lewellen Gmit. Edu.
- Mahdavi, H., Bayati, F., Rasti M. & Bozorgi, M. (2008). Key success factors in knowledge-oriented firms", technological development, fall.
- McMillan, D.G. (2001). Nonlinear predictability of stock market returns: Evidence from nonparametric and threshold models. *International Review of Economics and Finance*, 10, 353-368.
- Michelson stuart, E. James J. W. & Charless, W. (2000). The relationship between the smoothing of reported income and risk-adjusted return. *Journal of Economic and finance*, 24, 2.
- Penman, S.H., Richardson, S.A. & Tuna, I. (2007). The Book-to-Price Effect in Stock Returns: Accounting for Leverage", *Journal of Accounting Research*, 45, 427-467.
- Rahnavradsahan, F. & Mohammadi, A. (2009). Key success factors of knowledge management system in colleges and Tehran higher education institutions", *Information Technology Management*, autumn and winter 2009.
- Riahi Balkuyi, A. (2000). *Theories of Accounting*. Ali Parsaeian. Tehran: Culture and Management.
- Taghavi, M. (1999) *Intermediate Accounting 2*. Darsname publication, Tehran, 4.
- Valentin, D. & Prem C. J. (2006). "The Value Relevance of Changes in Financial Leverage. PP.1-40, 27-Zeithaml, VA.