

Prioritization of the Factors Effecting Privatization in Sport Clubs: With AHP & TOPSIS Methods - Emphasis in Football

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Abstract

The review of the literature in Sports Privatization indicates that approximately all the countries of the world place a significant value on the role and position of privatization of sports. However it should be taken into consideration that privatization in sports is not effective in its own sense; it is unpredictable that only privatization in sports is profitable without the provision of a set of conditions; as such the present research focuses on the most important factors affecting the privatization of the sports clubs and their prioritization.

After studying the research literature and current status of privatization of sport clubs and interviewing with the practitioners and teachers, familiar with the subject of the research, the factors affecting privatization of sport clubs was extracted. Decisional Hierarchy Tree was then drawn and a questionnaire was designed including 47 questions. Since the inconsistency rate calculated in this study is less than 0.1. Therefore it can be said that the questionnaire is valid.

"For the purpose of ranking the criteria, the AHP and TOPSIS approaches which are considered two important methods of MADM models, were applied. Since the results of administering the two methods were not in line, the results were combined by calculating the average mean. Eventually the economical aspects were considered the most significant factor; the other rankings included the administrative and management aspects, the legal aspects and the social aspects respectively. Moreover, the sub-criteria of these factors that numbered 31 were

prioritized as well. Consequently, the officials can apply prioritization for taking essential steps in the issue of privatization".

Keywords: *Football Economy, Privatization, Football Clubs, AHP, TOPSIS.*

Introduction

Attention to sports clubs especially the football clubs is socially, culturally and politically important. The successive revenue of football and the increasing number of its fans around the world has surpassed the national boundaries and has turned football to an important international phenomenon. This industry has gained recognizable revenue with the change of the traditional structure of the clubs. Along the entrance of the clubs into business, the shareholders inclination into investing to the industry has accelerated.

The study of the literature in Sports Privatization indicates that approximately all countries of the world place a significant value on the role and position of privatization of sports. Generally the governments have taken initiatives with regard to this issue which have led to positive results ^[1].

The experience of all the countries whether developed or developing or even least developed has shown that the augmentation and diversity of the government activities result in the government inefficiency in performing its responsibility and also damaging the private sector ^[2]. As such professional clubs as economical sources can have compound efficiency by private establishments ^[3]. Based on the principle 44 of the law, Iran is one of the countries which support privatization. As such initiatives are taken in sports industry and other industries, in a way that the discussion of privatization in Iranian sports clubs has been raised since 1382/2003.

Furthermore, based on the 4th development program law, all the administrative activities of the provision of professional sports resources are to be consigned to the private sectors until the end of the program (1388/2009). However, the study of the ownership of the professional sports clubs reveals high controlling of the government ^[4]. This is a fact while one of the rules of the **Federation International of Football Association (FIFA)** and Asian Football Confederation (AFC) on the ownership of the clubs is that the governmental establishments can not interfere with the clubs ^[5].

The mentioned issues reveal the importance of privatization of the sports clubs. However it should be taken into consideration that privatization in sports is not effective in its own sense; it is unpredictable that only privatization in sports is profitable without the provision of a set of conditions and presets. All these issues prompted the researcher to identify the factors affecting the privatization of the sports clubs and their prioritization with "Analytical Hierarchy Process (AHP)" and "Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)".

The AHP and TOPSIS are two significant methods of "Multiple Attribute Decision Making (MADM)". In an article named "the Identification and Prioritization of the Effective Factors of the Efficiency of the Human Forces Using MADM Technique", the AHP, TOPSIS, SAW and ELECTRE methods were used for ranking the factors ^[6]. In 2008, several international articles were published which applied the AHP and TOPSIS techniques simultaneously some of which are study of the trash transportation companies using fuzzy-AHP and TOPSIS methods ^[7] and Transshipment site selection using the AHP and TOPSIS approaches ^[8]. In the analysis of the

privatization policy in Iranian sports with an emphasis of the Championship sport, Razavi (2005) found that 83.3% of the administrators support the privatization policy ^[9]. Mclean and Gustafson (2002) investigated the effects of privatization of the national gulf fields and their staffs ^[10].

AHP Technique

Analytical Hierarchy Process is the most reliable method among MADM methods ^[11]. This method was presented by Professor Sa'ati as one of the methods for multiple-criteria decision making. the purpose of this process is creating or setting up of hierarchy process of an issue during categorized degrees from large to small or general to specific and financial so to gain more precision according to the understanding of the subject. In order to administer the AHP, first the analytical hierarchy tree should be drawn. The next step is to provide the pair comparative tables of the criteria and sub-criteria and submit to the participants. The tables filled by the participants must be analyzed based on the incompatibility rate and the tables with high incompatibility rates are to be deleted. Finally the participants' opinions are to be combined with geometrical average and a final ranking of the criteria is achieved ^[12, 13]. This stage is performed by the Expert Choice software.

TOPSIS Technique

This method was offered by Hwang and Yoon on 1981^[14]. In this method the M factor or option is evaluated by one person or a group of decision makers. This technique is based on the concept that each choosing factor must hold the least distance from the ideal factor and most distance negative factor ^[15,16,17].

Methodology

The present study was analytic descriptive considering the research method and implicational considering the research type. For data accumulation the library and square methods were utilized. The effective factors were identified by referring to the books and articles related to privatization and sports clubs in the library method and by interviewing the administrators and instructors familiar with the research subject in the square method; then the accumulated variables were set in 5-degree hierarchies based on the opinion of some researchers who were familiar with the AHP method (Figure 1). Eventually the research questionnaire was designed using the decision making tree.

The questionnaire consists of 47 items. The validity of the mentioned questionnaire which deals with the comparison of the privatization factors is highly dependent on the validity of AHP technique which is determined by the incompatibility rate of the pair comparisons; and considering that the incompatibility rate in this study is less than .01, it can be concluded that the questionnaire is valid. Furthermore, for ascertaining of the presence of the required conditions for applying this technique and the reliability of the factors and finally the questionnaire, different interviews with different instructors of Management, Finance, Law and Physical Education were carried out; and after these modifications were applied, the final questionnaire was provided. The softwares EXCELL and CHICE EXPERT were applied for data analysis.

The Statistical Community of the present study includes university faculty members in Sports Management and Economics, the dean or union football association, football federation, and football league organization and finally the managing director, assistants or the clubs marketing officials.

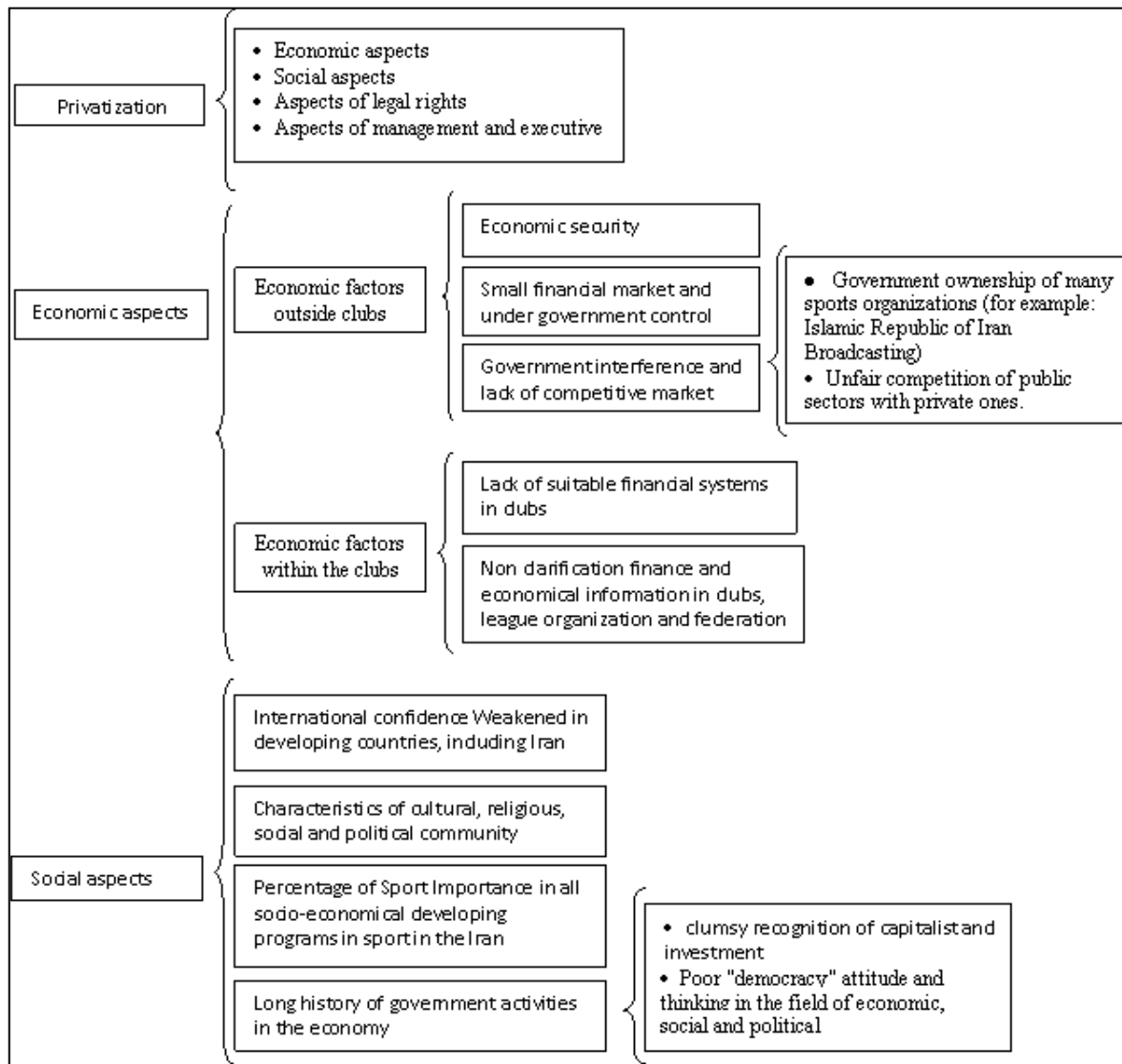


Fig 1 (Section 1): Analytical hierarchy tree factors effecting privatization in Iran sport clubs

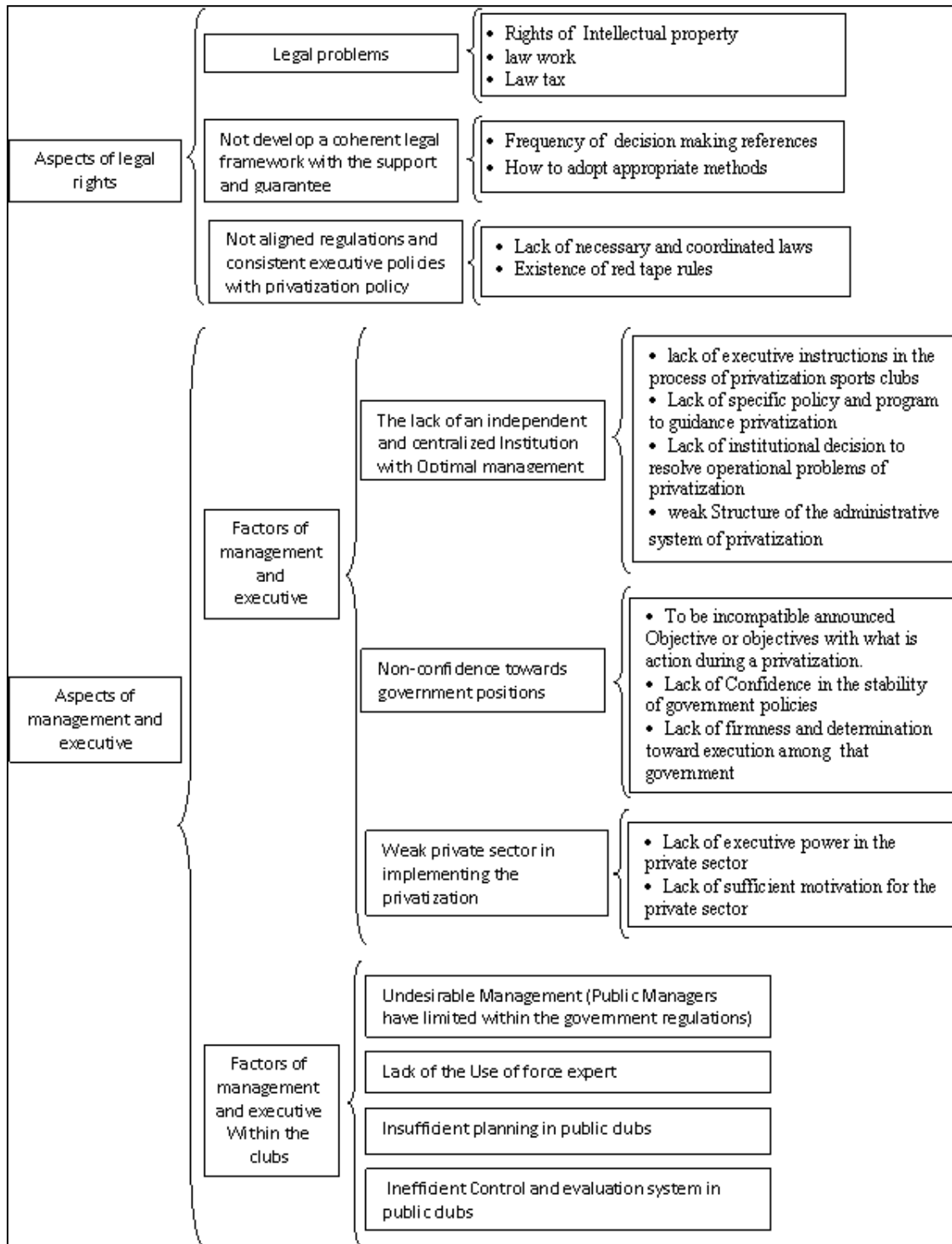


Fig 1 (Section 2): Analytical hierarchy tree factors effecting privatization in Iran sport clubs

Findings

After filling out the questionnaires the opinions of different individuals were combined using EXPERT CHOICE. 15 out of 20 questionnaires were gathered and the last one was included in the software and its incompatibility rate was assessed. The software provided a combining matrix for each of the matrixes (in which the points of each individual were set on a geometrical average); the final ranking provided us with 31 criteria with the weight of each distinctively. The resulted weights were used for setting up the decision matrix for administering the TOPSIS method. The result of the evaluation of each participant was considered as one column for the decision matrix. Considering the completion and gathering of 15 questionnaires, a 31-line decision matrix (the No. of criteria) and 15 column (No. of participants) was achieved which is the basis for other multiple-index decision making techniques (Table 1, 2).

Table 1: ranking the main aspects of effective privatization of sports clubs with AHP and TOPSIS method

Main aspects	Ranking of main aspects with TOPSIS	C_i^* of Main aspects with TOPSIS	Ranking of main aspects with AHP	Weight of Main aspects with AHP
Economic aspects	1	0.610	1	0.407
Social aspects	4	0.286	4	0.130
Aspects of legal rights	3	0.374	3	0.178
Aspects of management and executive	2	0.494	2	0.311

* distance factor from the ideal factor and negative factor

Table 2: Prioritization of the 31 factors effecting privatization in Iran sport clubs with AHP, TOPSIS method

Main aspects	criteria	Weight criteria in the each aspect with AHP	Final weight with AHP	Rank with AHP	C_i^* in TOPSIS	Rank with TOPSIS
Economic aspects	1.Economic security	0.336	0.137	1	0.600	1
	2. Small financial market and under government control	0.080	0.032	13	0.180	12
	3. Government ownership of many sports organizations	0.112	0.046	5	0.173	15

Main aspects	criteria	Weight criteria in the each aspect with AHP	Final weight with AHP	Rank with AHP	C_i^* in TOPSIS	Rank with TOPSIS
	4. Unfair competition of public sectors with private ones.	0.101	0.041	8	0.209	7
	5. Lack of suitable financial systems in clubs	0.207	0.084	2	0.344	2
	6. Non clarification finance and economical information in clubs, league organization and federation	0.163	0.066	3	0.230	6
Social aspects	7. International confidence Weakened in developing countries, including Iran	0.125	0.013	24	0.185	10
	8. Characteristics of cultural, religious, social and political community	0.326	0.034	12	0.147	17
	9. Percentage of Sport Importance in all socio-economical developing programs in sport in the Iran	0.411	0.042	7	0.230	5
	10. clumsy recognition of capitalist and investment	0.050	0.005	31	0.020	31
	11. Poor "democracy" attitude and thinking in the field of economic, social and political	0.088	0.009	26	0.083	23
Aspects of legal rights	12. Rights of Intellectual property	0.105	0.019	21	0.098	21
	13. law work	0.044	0.008	28	0.032	29
	14. Law tax	0.047	0.008	29	0.025	30
	15. Frequency of decision making references	0.165	0.029	17	0.179	13
	16. How to adopt	0.260	0.046	6	0.307	3

Main aspects	criteria	Weight criteria in the each aspect with AHP	Final weight with AHP	Rank with AHP	C_i^* in TOPSIS	Rank with TOPSIS
	appropriate methods					
	17. Lack of necessary and coordinated laws	0.197	0.035	11	0.113	20
	18.Existence of red tape rules	0.182	0.032	14	0.185	9
Aspects of management and executive	19.lack of executive instructions in the process of privatization sports clubs	0.022	0.007	30	0.064	24
	20.Lack of specific policy and program to guidance privatization	0.046	0.014	22	0.055	26
	21.Lack of institutional decision to resolve operational problems of privatization	0.028	0.009	27	0.040	28
	22.weak Structure of the administrative system of privatization	0.034	0.011	25	0.053	27
	23. To be incompatible announced Objective or objectives with what is action during a privatization.	0.071	0.022	20	0.124	19
	24.Lack of Confidence in the stability of government policies	0.123	0.038	9	0.142	18
	25.Lack of firmness and determination toward execution among that government	0.100	0.031	15	0.180	11
	26.Lack of executive power in the private sector	0.044	0.014	23	0.088	22
	27.Lack of sufficient motivation for the private sector	0.078	0.024	19	0.063	25

Main aspects	criteria	Weight criteria in the each aspect with AHP	Final weight with AHP	Rank with AHP	C_i^* in TOPSIS	Rank with TOPSIS
	28.undesirable Management	0.155	0.048	4	0.201	8
	29. Lack of the Use of force expert	0.116	0.036	10	0.259	4
	30.Insufficient planning in public clubs	0.086	0.027	18	0.157	16
	31.Inefficient Control and evaluation system in public clubs	0.098	0.030	16	0.174	14

* distance factor from the ideal factor and negative factor

Discussion

Considering the findings of the AHP and TOPSIS methods, different rankings were achieved. For the collection of the rankings, the average of the ranks method was used (Table 3).

Table 3: Ranking based on the combined results of two methods, AHP and TOPSIS

Main aspects	criteria	Rank with TOPSIS	Rank with AHP	Combine rank
Economic aspects	1.Economic security	1	1	1
	2. Small financial market and under government control	12	13	12.5
	3. Government ownership of many sports organizations	15	5	10
	4. Unfair competition of public sectors with private ones.	7	8	7.5
	5. Lack of suitable financial systems in clubs	2	2	2
	6. Non clarification finance and economical information in clubs, league organization and federation	6	3	4.5
Social aspects	7. International confidence Weakened in developing countries, including Iran	10	24	17
	8. Characteristics of cultural, religious,	17	12	14.5

Main aspects	criteria	Rank with TOPSIS	Rank with AHP	Combine rank
	social and political community			
	9. Percentage of Sport Importance in all socio-economical developing programs in sport in the Iran	5	7	6
	10. clumsy recognition of capitalist and investment	31	31	31
	11. Poor "democracy" attitude and thinking in the field of economic, social and political	23	26	24.5
Aspects of legal rights	12. Rights of Intellectual property	21	21	21
	13. law work	29	28	28.5
	14. Law tax	30	29	29.5
	15. Frequency of decision making references	13	17	15
	16. How to adopt appropriate methods	3	6	4.5
	17. Lack of necessary and coordinated laws	20	11	15.5
	18. Existence of red tape rules	9	14	11.5
Aspects of management and executive	19. lack of executive instructions in the process of privatization sports clubs	24	30	27
	20. Lack of specific policy and program to guidance privatization	26	22	24
	21. Lack of institutional decision to resolve operational problems of privatization	28	27	27.5
	22. weak Structure of the administrative system of privatization	27	25	26
	23. To be incompatible announced Objective or objectives with what is action during a privatization.	19	20	19.5
	24. Lack of Confidence in the stability of government policies	18	9	13.5
	25. Lack of firmness and determination toward execution among that government	11	15	13
	26. Lack of executive power in the private sector	22	23	22.5
	27. Lack of sufficient motivation for the private sector	25	19	22
	28. undesirable Management	8	4	6
	29. Lack of the Use of force expert	4	10	7

Main aspects	criteria	Rank with TOPSIS	Rank with AHP	Combine rank
	30. Insufficient planning in public clubs	16	18	17
	31. Inefficient Control and evaluation system in public clubs	14	16	15

Considering the results of the prioritization, the economical aspects were the most important factors of the privatization of the sports clubs; the other rankings included the administrative and management aspects, the legal aspects and the social aspects respectively. The first priority that is the economical aspects prove that the privatization is highly dependent on such aspects. As such, the official must attend to the economical aspects when considering the privatization of the sports clubs and pave the way for privatization by increasing the economical safety, providing proper financial systems in the clubs and clarifying the monetary information of the clubs.

The economical safety holds the highest priority among the 31 sub-criteria in both methods of AHP and TOPSIS. Generally, the potential investors prefer to invest in sectors which guarantee the returning of the investment money and choose the least risky options. In other words in an industry in which the amount of efficiency is higher the moving of investments accelerates^[18].

The result of the present study is in line with those of Huda (2001) and Elahi (2008). For example Huda, found that the principle of profit expectation of the investment as the most important factor in attracting the internal and external investors^[19]. Therefore considering the prioritization resulted from the present research, the final objective of the appropriate privatization of the sports clubs can be achieved in a step by step basis.

References

1. Shahrokshahi. M, 2009, Privatization in Sports, the Reduction of Government Expenses, *Barname Weekly*, 7(310), pp. 23-27.
2. Movahhedi. A, 1995, the study of the factors affecting the disinclination of the private sector for investigating in tourism industry, Ms Thesis, Faculty of Management and Accountancy, Allameh Tabatabaie University of Tehran.
3. Elahi. A, 2008, Barriers and approaches of economical development in football industry of Islamic republic of Iran, PhD thesis, Faculty of Physical Education, Tehran University.
4. Elahi. A, Sajjadi, N, Khabir. M, Abrishami. H, 2009, Evaluation of barriers in sponsorship development in Iran's football industry, *University of Tehran, Sport Management Journal*, Vol. 1, pp. 189-202.
5. Khabiri. M, 2004, Comparison of professional football league in Iran as for UEFA and Japan and South Korea, emirates turkey, The Physical Education Research Center, the Ministry of Science, Research planning.
6. Tavari. M, 2008, The Identification and Prioritization of the Effective Factors of the Efficiency of the Human Forces Using MADM Technique, *Industrial management*, 1(1): pp. 71-88.
7. Gumus. A T, 2009, Evaluation of Hazardous Waste Transportation Firms by Using a Two Step Fuzzy-AHP and TOPSIS Methodology, *Expert Systems with Application*, 36 (2), pp. 4067-4074.
8. Onut. S & Selin. S, 2008, Transshipment Site Selection Using the AHP and TOPSIS Approaches under Fuzzy Environment, *Waste Management*, Vol. 28, pp. 1552-1559.
9. Razavi. M H, 2005, The Analysis of Privatization Policy in Iran Industry with Concentration on Championship Sport, PhD thesis, Faculty of Physical Education and sport sciences, University of Tehran.
10. Mclean, D.D. and T.F. Gustafson, 2002. Privatization and its effect on public Golf employees. *LarNet; the cyber journal of applied leisure and recreation research*, pp. 1-8.
11. Vafaie. F, 2007, Designing a Mathematical Model for MADM Effectiveness Scaling by DEA Method in EFQM System, *Management-Operation in Research Thesis*, Tarbiat Modares University of Tehran.
12. Momeni, M., 2006. *New research in operation*. First edition, Tehran University publication, PP: 280-305.
13. Son Yu, Chian, 2002, a GP-AHP Method for solving Group Decision-Making Fuzzy AHP Problems, *Computer and Operations Research*, (29), 1970.
14. C.L. Hwang, K. Yoon, 1981, *Multiple Attribute Decision Making Methods and Applications*, Springer, Berlin Heidelberg.
15. Azar. A, Rajabzadeh. A, 2008, *Applied decision making (MADM approach)*, Negah danesh publication, pp. 126-127.
16. Jahanshahloo. G R, Hosseinzadeh Lotfi. F, Izadikhah. M, 2006, Extension of the TOPSIS Method for Decision-Making Problems with Fuzzy Data, *Applied Mathematics and Computation*, 181, pp. 1544-1551.
17. Eraslan. E& Tansel. IC Y, 2011, a Multi-Criteria Approach for Determination of Investment Regions: Turkish Case, *Industrial Management & Data Systems*, Vol. 111, No. 6, pp. 890-909.
18. Behkish. M, 2006, *Iran economy in globalization*, Tehran Ney publication, pp. 10-23.

19. Huda. H.A.K, 2001, Investors opinions about sports marketing in Bahrain, The sport journal, 4(4). www.thesportjournal.org/2001_journal/vol4-no4.