

# Identifying and Ranking Factors Influencing on Investor Attraction in Golestan Province by Means of Fuzzy Multi-Index Decision-Making (FAHP)

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## Abstract

There is no doubt that attracting investor in economic and industrial sectors is one of the key and effective issues. We can take giant strides toward improvement with the advent of investors in infrastructure sectors. The research is the result of an applied research with the aim of identifying and ranking factors which are effective on attracting investor under fuzzy environment. Hence analysis hierarchy process (Ahp\_Fuzzy model) was suggested. The research method is descriptive-survey, where factors which influence on investor attraction in Golestan province, had been identified in terms of research literature. The factors were prioritized based on comments of 25 senior managers and economic experts in management and planning organization and chamber of commerce through Ahp. The research findings indicate that lack of a coordinated and efficient plan for identifying weakness, opportunities, and intimidations is the most important problem and it is a fundamental obstacle in Golestan province in order to attract investors and to specify an appropriate strategy with significance coefficient of 0.227. There are some other obstacles for attracting domestic and foreign investors in the province which are as follows:

Lack of appropriate administrative organization, lack of right and efficient management with significance coefficient of 0.220, lack of primary infrastructure facilities and fundamental infrastructure and public services with significance coefficient of 0.204, limitation and lack of flexibility in rules and regulations related in investing in Goelstan province with significance coefficient of 0.198 and finally side effect of policy makings of government in macro level with significance coefficient of 0.151.

In fact, the research results are exactly compatible with current economic condition of the area. We can establish a comprehensive outlook for government and senior managers of the area according to level of significance and level of influence of the indices.

**Keywords:** attracting investor, Golestan province, FAHP

## 1. Introduction

Investment is expenditures allocated to plans for products which are not used quickly. Investment plans may be in form of increasing material capital and human investment or inventory. Investment is in fact a flow in which the magnitude is determined by all the plans whose positive and pure value or internal interest rate are more than interest rate. Hence, the first reason is in fact current pure value and the second one is final investing return. In fact, investing is the most fundamental issue in economy and industry. Without investment, nothing is produced and wealth is not obtained (Nahidi et al, 2011).

Golestan Province is located in north of Iran and Gorgan city is in center of the province. The province is 20437/7 square kilometers which is equal to 1/3 percent of total size of Iran. It is the twenty first province of Iran in terms of magnitude. From north it leads to Turkmenistan, from west to Mazandaran province and Caspian Sea and from south to Semnan province. It has mainly humid climate but Gorgan plain has semi-desert and hot climate, since it is located near Turkmenistan desert, it is far from sea and has low heights. The province is

suitable for investing geographically due to following reasons:

Access to international corridors and Central Asia markets, connection with various provinces, having joint border with Turkmenistan, having *Inche-boroun* border, being free zone, having mineral resources (coal, limpet, iodine and so on), and having Caspian Sea beach.

On the other hand, wide areas of the province include special merits of undeveloped area such as 10-year tax exemptions and using facilities with minimum portion which are regarded as merits of Golestan province for investing.

## 2. Condition of Domestic and Foreign Investing in Golestan Province

Golestan province has many unused capacities in different tourism sectors, industrial and even agriculture sectors and the sectors which have not been successful in attracting domestic and foreign investing for using such capacities. Investing in every area is influenced by macro factors of countries and certain factors of the area. Many factors in macro level made the province receive a semi-active strategy or static strategy in investing and attracting domestic and foreign capital:

Lack of-security, uncertainty, ambiguity, instability and not abiding by investing rules and other rules, arbitrary enforcement of law and not caring about attracting investment by authorities, and lack of encouraging investors and their disappointing behavior-with current investors, not supporting investors and narrow-minded behaviors.

If we agree that stability of growth and development in Golestan province is significant and important, then we will feel necessity of attracting capital for improvement and maintaining investing already done. Golestan province needs development strategy and development needs continuous investment.

Great number of young individuals who are willing to work, empty capacities in various sectors, caring about current industries and keeping cultural, social, economic, industrial and agriculture attractions in the province are factors which make it necessary to invest in the province. (Governor of Golestan province, 2015).

Activation of economy and industry sectors of the country, rise of employment, using empty capacities, qualitative and quantitative rise of products, development of imports, improving life standards of people and health are the most important positive results of investment in an appropriate atmosphere. (Kelich, 2011). Rise of investing in Golestan indicates trust to economic system, industry and rules of Iran which will lead to a new activities. Investment will be followed by modern management and methods which can provide a condition for development in many structures and behaviors.

## 3. Applying Finance Method for Developing Investing Attraction in Various Sectors

Finance is one of the investing methods or a type of investing facility which can be useful in some cases along with other methods. If there is more competition in investing, methods and facilities will be introduced in the country and in global level which will be finally beneficial to economy, industry and society. (Akbari, 2010).

So far there have been various and appropriate researches on significance of attracting investor. But the research is the first to focus on Golestan province. Some similar researches conducted are as follows:

Cohan Lee and Guang Liang (2012) did a research called "reviewing political relations and direct foreign investments". In the research they used descriptive-survey method and regarding direct foreign investing China concentrates on countries which are risky politically. As a result, as for direct foreign investments and direct foreign investment Chinese econometrists and elites regard role of political relations between states important. The research is formed of two tests, one in organizational level and the other in two-vectored level.

Clich (2011) conducted a research titled reviewing "causality relation between economic growth and foreign investment growth in Iran's provinces." Research method was library and data were extracted from Iranian center, investment organization and central bank time series. In the research Granjer and Hiaeo causality tests and Akaike Final Prediction Error EPE criterion were used. The results indicated that there is a bilateral relationship between economic growth and foreign investment growth in Iran's provinces.

Nahidi et al (2011) conducted a research called "factors affecting investment attraction in Aras free zone and prioritizing them based on AHP."

The findings of the research indicate the truth that side effect of government's policy makings in macro level of society and lack of transparency and efficiency of rules and regulations of free zones with priority coefficient of 0/1290 and 0/1230 are key problems of the area in attracting domestic and foreign capital. Lack of appropriate and strong and efficient management in Aras Free zone with priority coefficient of 0/1119, lack of infrastructure facilities and public services in Aras free zone with priority coefficient of 0/1085 and positioning with coefficient

of 0/0986 are in the next rankings.

#### 4. Research Method

The research has an applied objective where data were gathered through descriptive-survey. And it has quantitative approach. Field of study is Golestan province and statistical society is managers, experts of chamber of commerce and plan and budget organization of the province. At first a conceptual model, which is result of valid previous resources and interviews with experts, was provided within framework of a questionnaire in which main and secondary factors affecting investor attraction are introduced:

- Infrastructural facilities
- Rules and regulations
- Management
- Policy-makings
- Strategic planning

According to significance of strategic planning, we sought to review the factor in separated form and the results will be presented. Also each of the main factors were divided into separate subsets which can be effective on attracting capital in Golestan province. Specifying priorities and significance coefficient of above factors can be important as a useful and efficient act for economic planners in order to attract more capitals in the province.

Facilities were classified into three subsets including:

- 1) Infrastructure facilities: water, power and fuel installations, transportation system, access to advanced telephone networks, land and so on
- 2) Public services: entertainment, health, accommodation, insurance and baking facilities.

Advanced infrastructures: harbor modern installations, usable ports, equipped airports in area, railways, modern urban installations, and so on.

Factor of rules and regulations are classified into three sets including:

- 1) Stability and transparency in rules
- 2) Providing security through rules
- 3) Determining financial motivations in rules and regulations

Factor of management is divided into three sets including:

- 1) Efficient and objective management
- 2) Establishing useful administrative system
- 3) Informing and marketing

Policy-making factor is divided into three sets including:

- 1) Allocating public budget
- 2) Liberalization and privatization
- 3) Developing international relations

Strategic planning factor is divided into three sets including:

- 1) Strength points
- 2) Weakens points
- 3) Intimidation points
- 4) Opportunities points

Also FAHP method was used for prioritizing factors which is effective on investor attraction in Golestan province which will be dealt in the next sections.

#### 5. Introducing AHP

The AHP process is a research technique for supporting logical decision-makings which are qualitative multi-factorial. The technique is a prominent management tool for solving complex multi-criterion decision-making problems. It can be explained as a method for providing flexible solutions for qualitative and quantitative problems. (Lee, Kim, Oh, 2012).

Concept of fuzzy in an ordinary AHP method was obtained indirectly without using fuzzy sets. In fact, in this method concept of fuzzy is used for specifying matrixes of pair comparing by means of verbal expression in table. Therefore, by explaining above method some methods will be provided in which fuzzy numbers are used for expressing level of priority of elements. We can point out methods presented by Chang, 1992. Also we can observe a wide research regarding these techniques in works of Kahraman, Cebeci, Ruan, 2004. In this study AHP was used through Chang development analysis.

Table 1. membership function of language variables for determining weight of criteria

Reversed fuzzy number	Triangle fuzzy number	Language variable
(1, 1, 1)	(1, 1, 1)	Exactly equal significance
( $\frac{2}{3}$ , 1, 2)	( $\frac{1}{2}$ , 1, $\frac{3}{2}$ )	Little more important
( $\frac{1}{2}$ , $\frac{2}{3}$ , 1)	(1, $\frac{3}{2}$ , 2)	More important
( $\frac{2}{5}$ , $\frac{1}{2}$ , $\frac{2}{3}$ )	( $\frac{3}{2}$ , 2, $\frac{5}{2}$ )	Much more important
( $\frac{1}{3}$ , $\frac{2}{5}$ , $\frac{1}{2}$ )	(2, $\frac{5}{2}$ , 3)	Significantly important
( $\frac{2}{7}$ , $\frac{1}{3}$ , $\frac{2}{5}$ )	( $\frac{5}{2}$ , 3, $\frac{7}{2}$ )	Completely important

**6. Steps of AHP Fuzzy Method**

In development analysis method for each one of matrices of paired comparing, SK which is a triangular fuzzy number, that can be calculated as follows: (Azar and Faraji, 2008).

If  $X=\{X1, X2, X3, \dots, Xn\}$  is set of goals and  $U=\{u1, u2, \dots, un\}$  is set of goals, then we may analyze development for each of goals (gi) by considering each goal. Therefore, we may have M value of development analysis for each goal:

$$M_{gi}^n \text{ و } \dots \text{ و } M_{gi}^2 \text{ و } M_{gi}^1 \text{ و } \dots \text{ و } i=1,2,3,\dots,n$$

$$\begin{bmatrix} M_{g1}^1 & M_{g1}^1 & \dots & M_{g1}^n \\ M_{g1}^2 & M_{g2}^2 & \dots & M_{g2}^m \\ \vdots & \vdots & \dots & \vdots \\ M_{gn}^1 & M_{gn}^2 & \dots & M_{gn}^m \end{bmatrix}$$

Where all  $M_{gi}^j$  are triangular fuzzy values which are expressed in form f(l, M, u).

**7. Steps of Chan Development Analysis is as Follows**

First step: obtaining fuzzy expanded compound for each goal.

If  $M_{gi}^m$ ,  $M_{gi}^2$ , and  $M_{gi}^1$  are i times values for each m goal, then m fuzzy expanded compound for i times will be defined as follows:

If  $M_{gi}^1 = (l_{ij}, m_{ij}, u_{ij})$ , then  $\sum_{j=1}^m M_{gi}^j$  will be defined by total fuzzy operator on m development analysis which is as follows:

$$(\sum_{j=1}^m l_{ij}, \sum_{j=1}^m u_{ij}) = (l'_i, m'_i, u'_i)$$

Also to obtain  $[\sum_{i=1}^n \sum_{j=1}^m \sum_{gi}^j]^{-1}$ , we will have:

$$\sum \sum M_{gi}^i = \sum_{i=1}^n \left( \sum_{j=1}^m l_{ij}, \sum_{j=1}^m m_{ij}, \sum_{j=1}^m u_{ij} \right) = \left( \sum_{i=1}^n l'_i, \sum_{i=1}^n m'_i, \sum_{i=1}^n u'_i \right)$$

$$\left( \sum_{i=1}^n \sum_{j=1}^m m_{gi}^j \right)^{-1} = \left( \frac{1}{\sum_{i=1}^n u_i'} \quad \frac{1}{\sum_{i=1}^n m_i'} \quad \frac{1}{\sum_{i=1}^n l_i'} \right)$$

$$S_i = \sum_{j=1}^m M_{gi}^j * \left[ \sum_{i=1}^n \sum_{j=1}^m M_{gi}^j \right]^{-1}$$

Therefore:

$$\begin{aligned} (l_i', m_i', u_i') * \left( \frac{1}{\sum_{i=1}^n u_i'} \quad \frac{1}{\sum_{i=1}^n m_i'} \quad \frac{1}{\sum_{i=1}^n l_i'} \right) &= \left( \frac{l_i'}{\sum_{i=1}^n u_i'} \quad \frac{m_i'}{\sum_{i=1}^n m_i'} \quad \frac{u_i'}{\sum_{i=1}^n l_i'} \right) = (l_i, m_i, u_i) \\ S_k &= \sum_{j=1}^n M_{ij} \otimes \left[ \sum_{i=1}^m \sum_{j=1}^n M_{ij} \right]^{-1} \end{aligned} \quad (1)$$

In which K indicates number of paragraph and i and j indicate options and indices, respectively. (Ranjbar Chi, 2014).

Second phase: in this method after calculating  $S_k$  we need to obtain three levels of size. Generally,  $M_1$  and  $M_2$  are two triangular fuzzy values and magnitude level of  $M_1$  and  $M_2$  are defined as follows:

$$\begin{cases} V(m_i \geq M_k) = 1 \\ V(m_i \geq M_k) = hgt(m_i \cap M_k) \end{cases} \quad m_i \geq m_k \quad \text{If} \quad (2)$$

And we have:

$$hgt(M_i \cap M_k) = \frac{u_i - L_k}{(u_i - L_k) + (m_k - m_i)} \quad (3)$$

Third phase: magnitude of a triangular fuzzy number in K can be obtained from following relation:

$$V(M_1 \geq M_2, \dots, M_K) = V(M_1 \geq M_2) \text{ and } \dots \text{ and } V(M_1 \geq M_K) \quad (4)$$

Also to calculate weight of indices in matrix of paired comparing, we will act as follows:

$$W'(x_1) = \min\{V(S_i \geq S_k)\} \quad K = 1, 2, \dots, n, k \neq i \quad (5)$$

Forth step: therefore, vector of indices weight will be as follows:

$$W' = [W'(x_1), W'(x_2), \dots, W'(x_n)]^t \quad (6)$$

Which is abnormal coefficient vector. To obtain normal vector, we will act as follows:

$$W(X_K) = \frac{W'(X_K)}{\sum_{k=1}^n W'(X_K)} \quad (7)$$

These steps were done for all the tables of paired comparisons so that normal weights can be obtained (Ranjbarchi, 2014).

## 8. Research Results

Process of conducting the research is based on FAHP concept with following results:

First step: arranging FAHP:

First, FAHP tree is designed according to previous researches and through comments of experts in order to identify and rank factors which affect investor attraction in Golestan province. The results are identification of 15 effective factors which are classified into 5 main factors. Also the tree was presented in graph.

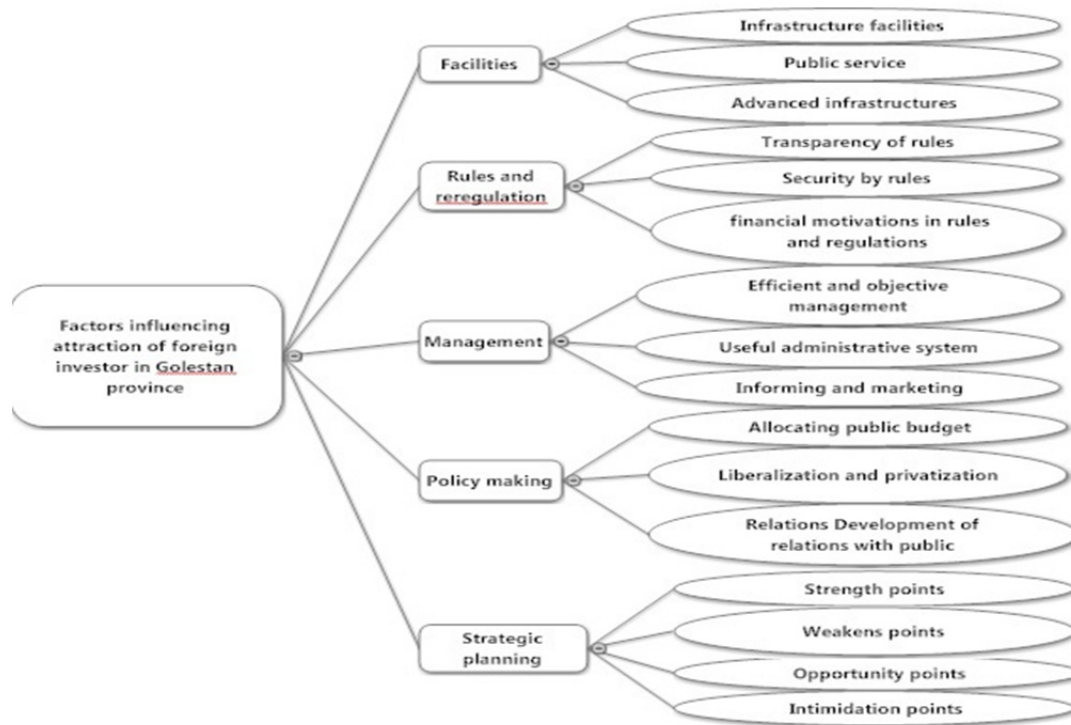


Figure 1. FAHP tree, identifying factors which are effective on investor attraction in Golestan province

Second step: Calculating main factors weight

In this step to calculate relative weight of each main factors, a questionnaire was prepared and distributed according to FAHP format for obtaining comments of experts. The questionnaire includes one matrix for paired comparing of factors. Considering that level one has 5 factors, number of paired comparing or questionnaire will be 10.

$$\frac{n(n-1)}{2} = \frac{5(5-1)}{2} = 10$$

In which n is number of factors in level one.

After completing questionnaire, rate of incompatibility for each one is reviewed where finally 25 questionnaires will be analyzed. Using EXCEL, comments of individuals will be mixed. In fact the software has wide facilities for obtaining matrices of paired comparing. Combining matrices of various people and changing them into a single matrix, we may obtain elements of matrices of individuals.

Table 2. matrix of combined paired comparing of experts for main factors.

	Facilities	Rules and regulations	Management	Policy -making	Strategic planning	Weight	$\sum_{j=1}^m M_{ji}^j$
Facilities	(1,1,1)	(1.14,1.51,1.71)	(0.92,1.26,1.65)	(1.06,1.49,1.92)	(0.94,1.46,1.42)	(0.204)	(5.05,6.71,7.69)
Rules and regulations	(1.08,0.69,0.85)	(1,1,1)	(0.86,1.36,1.29)	(1.23,1.75,1.88)	(0.78,1.07,1.19)	(0.198)	(4.95,6.70,6.95)
Management	(0.88,1.37,1.58)	(1.31,1.73,1.56)	(1,1,1)	(1.48,1.84,2.25)	(0.76,1.16,0.98)	(0.220)	(5.43,7.10,7.78)
Policy – making	(0.85,1.28,1.55)	(0.74,0.90,1.12)	(0.69,0.93,1.18)	(1,1,1)	(1.05,1.41,1.79)	(0.151)	(4.32,5.53,6.63)
Strategic planning	(1.10,1.52,1.76)	(1.33,1.62,1.95)	(1.48,1.78,2.09)	(0.96,1.31,1.88)	(1,1,1)	(0.227)	(5.87,7.24,8.68)

Results of analyzing table (2) indicate that criterion for strategic planning with relative weight of .227 is in the first place. Next, comes management criterion with relative weight of .220 which is in the second place. Facility factor with relative weight of .204 is in the third place. Factor of rules and regulations with relative weight of .198 is in the fourth place and finally factor of policy-making with relative weight of .151 is in the fifth significance level.

In fact, above calculations were conducted by means of AHP method based on Chang theory which is introduced as follows:

First step) for each of paired comparisons matrices, value of  $S_i$  which is a triangular fuzzy number can be calculated through following relation:

It is worth to mention that ratios of fuzzy mentioned in table (2) are average geometric of experts' comments who participated in the study.

$$S_k = \sum_{j=1}^n M_{kj} * \left[ \sum_{i=1}^m \sum_{j=1}^n M_{ij} \right]^{-1}$$

$$\left[ \sum_{i=1}^m \sum_{j=1}^n M_{ij} \right]^{-1} = (25.63, 33.28, 37.73)^{-1} = (0.03, 0.03, 0.04)$$

$$S_1 = (5.05, 6.71, 7.69) \otimes (0.03, 0.03, 0.04) = (0.13, 0.20, 0.30)$$

$$S_2 = (4.95, 6.70, 6.95) \otimes (0.03, 0.03, 0.04) = (0.13, 0.20, 0.27)$$

$$S_3 = (5.43, 7.10, 7.78) \otimes (0.03, 0.03, 0.04) = (0.14, 0.21, 0.30)$$

$$S_4 = (4.32, 5.53, 6.63) \otimes (0.03, 0.03, 0.04) = (0.11, 0.17, 0.26)$$

$$S_5 = (5.87, 7.24, 8.68) \otimes (0.03, 0.03, 0.04) = (0.16, 0.22, 0.34)$$

Second step) after calculating  $S_i$  we need to calculate magnitude of each of elements by means of relation related and the results are as follows.

$$V(S_1 \geq S_2) = 1, V(S_1 \geq S_3) = 0.93, V(S_1 \geq S_4) = 1, V(S_1 \geq S_5) = 0.90$$

$$V(S_2 \geq S_1) = 1, V(S_2 \geq S_3) = 0.91, V(S_2 \geq S_4) = 1, V(S_2 \geq S_5) = 0.88$$

$$V(S_3 \geq S_1) = 1, V(S_3 \geq S_2) = 1, V(S_3 \geq S_4) = 1, V(S_3 \geq S_5) = 0.97$$

$$V(S_4 \geq S_1) = 0.78, V(S_4 \geq S_2) = 0.78, V(S_4 \geq S_3) = 0.71, V(S_4 \geq S_5) = 0.67$$

$$V(S_5 \geq S_1) = 1, V(S_5 \geq S_2) = 1, V(S_5 \geq S_3) = 1, V(S_5 \geq S_4) = 1$$

Third step: to calculate weight of indices in matrix of paired comparing, we have followings:

$$\text{Min } V(S_1 \geq S_2, S_3, S_4, S_5) = 0.90$$

$$\text{Min } V(S_2 \geq S_1, S_3, S_4, S_5) = 0.88$$

$$\text{Min } V(S_3 \geq S_1, S_2, S_4, S_5) = 0.97$$

$$\text{Min } V(S_4 \geq S_1, S_2, S_3, S_5) = 0.67$$

$$\text{Min } V(S_5 \geq S_1, S_2, S_3, S_4, S_5) = 1$$

Therefore, vector of abnormal weight will be as follows:

$$W' = [0.90, 0.88, 0.97, 0.67, 1]^T$$

Forth step: Based on following relation, value of normalized weights for main criteria will be obtained.

$$\sum_{i=1}^5 w'_i = 4.41$$

$$W_i = \frac{w'_i}{\sum w'_i}$$

$$W = (W_1, W_2, W_3, W_4, W_5) = (0.204, 0.198, 0.220, 0.151, 0.227)$$

Also weight of each secondary factors will be calculated by means of method mentioned.

Third step: calculating local weight of secondary factor:

Calculating weight of secondary factors of facilities:

Table 3. Matrix for paired comparing of secondary factors of facilities

	Infrastructure facilities	Public services	Advanced infrastructures	Weight	Ranking
Infrastructure facilities	(1,1,1)	(1.26,1.83,2.02)	(1.02,1.35,1.70)	(0.381)	1
Public services	(0.83,1.36,1.69)	(1,1,1)	(1.35,1.77,2.20)	(0.376)	2
Advanced infrastructures	(0.87,1.21,1.47)	(0.55,1.01,1.04)	(1,1,1)	(0.243)	3

Results of analyzing table (3) indicate that factor of infrastructure facilities with relative weight of 0.381 is in the first ranking. Next is factor of public service with relative weight of 0.376 which is in the second place. And factor of advanced infrastructure with relative weight of 0.243 is in the first significance level.

Calculating weight of secondary factors of rules and regulations:

Table 4. Matrix for paired comparing for secondary factors of rules and regulations

	Transparency of rules	Security by rules	Financial motivations in rules and regulations	Weight	Ranking
Transparency of rules	(1,1,1)	(1.27,1.71,1.97)	(1.04,1.47,1.72)	(0.372)	1
Security by rules	(0.77,1.18,1.22)	(1,1,1)	(1.11,1.41,1.79)	(0.291)	3
Financial motivations in rules and regulations	(1.01,1.49,1.67)	(0.99,1.44,1.52)	(1,1,1)	(0.337)	2

Results of analyzing table (4) indicate that factor of stability and transparency in rules with relative weight of 0.372 is in the first place. Next (second) place is factor of determining financial motivations in rules and regulations with relative weight of 0.377. Factor of providing security by rules and regulations with relative weight of 0.291 is in the third level of significance.

Calculating weight of secondary factors management:

Table 5. Matrix for paired comparing for secondary factors management

	Efficient and objective management	Useful administrative system	Informing and marketing	Weight	Ranking
Efficient and objective management	(1,1,1)	(0.99,1.45,1.77)	(1.04,1.52,1.82)	(0.390)	1
Useful administrative system	(0.72,1.21,1.40)	(1,1,1)	(1.15,1.43,1.79)	(0.348)	2
Informing and marketing	(0.70,0.92,1.34)	(0.81,1.18,1.13)	(1,1,1)	(0.262)	3

Results of analyzing table (5) indicate that factor of efficient and objective management with relative weight of 0.390 is in the first step. Next comes establishing coordinated administrative system with relative weight of 0.348 and factor of informing and marketing with relative weight of 0.262 is in the third significance level.

Calculating weight of secondary factors of policy-making



Table 6. Matrix for paired comparing for secondary factors of policy-making

	Allocating public budget	Liberalization and privatization	Relations development with public sectors	Weight	Ranking
Allocating public budget	(1,1,1)	(1.55,2.02,2.50)	(0.77,1.25,1.35)	(0.426)	1
Liberalization and privatization	(0.46,0.91,0.86)	(1,1,1)	(0.91,1.26,1.57)	(0.245)	3
Relations development with public sectors	(0.92,1.32,1.62)	(0.87,1.26,1.47)	(1,1,1)	(0.329)	2

Results of analyzing table (6) indicated that factor of allocating public budget with relative weight of 0.426 is in the first place. Next is factor of developing relation with private sectors with relative weight of 0.329 in the second place. Factor of liberalization and privatization with relative weight of 0.245 is in the third significance level.

Calculating weight of secondary factors for strategic planning:

Table 7. Matrix of paired comparisons for secondary factors of strategic planning

	Strength points	Weakens points	Opportunity points	Intimidation points	Weight	Ranking
Strength points	(1,1,1)	(1.27,1.58,1.90)	(0.95,1.25,1.60)	(1.15,1.46,1.93)	(0.280)	2
Weakens points	(0.83,1.08,1.17)	(1,1,1)	(1.33,1.85,2.18)	(1.21,1.57,2.02)	(0.293)	1
Opportunity points	(1.01,1.31,1.67)	(0.62,0.90,1.05)	(1,1,1)	(1.28,1.62,1.99)	(0.246)	3
Intimidation points	(0.83,1.26,1.50)	(0.64,0.85,1.10)	(0.77,0.98,1.22)	(1,1,1)	(0.181)	4

Results of analyzing table (7) indicate that factor of weakness points with relative points of 0.293 is in the first step. Next comes factor of Strength points with relative weight of 0.280 which is in the second place. Factor of opportunity with relative weight of 0.246 is in the third place. Factor of intimidation with relative weight of 0.181 is in the fourth level of significance.

Fourth step: final weight of factors:

Final weight of factors in each set is obtained with multiplying local weight of elements in weight of main factors, by which we can specify ranking of each of elements which are effective on investor attraction in Golestan province. Results of process are brought in table (8).

Table 8. Ranking of factors which are effective on investor attraction in Golestan province based on FAHP method

Main factors	Weight of main factors	Secondary factors	Local weight of secondary factors	Final weight	Ranking
Strategic planning	0.227	Weakens points	0.293	0.066	7
		Strength points	0.280	0.063	9
		Opportunity points	0.246	0.056	12
		Intimidation points	0.181	0.041	15
Management	0.220	Efficient and objective management	0.390	0.086	1

		Useful administrative system	0.348	0.077	3
Facilities	0.204	Informing and marketing	0.262	0.057	11
		Infrastructure facilities	0.381	0.079	2
		Public services	0.376	0.076	4
Rules and regulations	0.198	Advanced infrastructures	0.243	0.050	13
		Transparency of rules	0.372	0.074	5
		Financial motivations in rules and regulations	0.337	0.067	6
Policy-making	0.151	Security by rules	0.291	0.058	10
		Allocating public budget	0.426	0.065	8
		Relations development with public sectors	0.329	0.049	14
		Liberalization and privatization	0.245	0.036	16

Results of analyzing table (8) including all the secondary factors that are affective on investor attraction in Golestan province, suggest that factor of efficient and objective management with relative weight of 0.086, infrastructure facilities with relative weight of 0.079, and establishing useful administrative system with relative weight of 0.077 are in the first to third places of significance of investing, respectively.

## 9. Conclusion and Suggestions

Establishing economic and industrial cities with a constant development can be a shortcut for reaching goals such as attracting domestic and foreign capital and quick industrialization. As it was observed, the most important problems and obstacles in Golestan province in attracting capital is as follows:

Lack of a coordinated plan for identifying weakness, strength, opportunity and intimidation points for specifying proper strategy with significance level of 0.277, lack of proper administrative organization and lack of proper management with significance coefficient of 0.220, lack of primary infrastructure facilities and public services with significance coefficient of 0.204, limitation and lack of flexibility in rules and regulations related to investment in Golestan province with significance coefficient of 0.198 and finally side effect of government policy-makings in macro level with significance coefficient of 0.151 are other obstacles for attracting domestic and foreign capital.

Based on the findings, following suggestions are presented for removing obstacles:

1. Achieving macro goals of the province needs appropriate planning and specifying priorities related to proper strategies needs abundant time and work which need a strong and efficient management. Hence, two cases seem necessary:
  - a) Maintaining specialized and efficient workforces and managers
  - b) Training managers and attracting efficient workforces
2. Managers of the area need to avoid bureaucracy. The need to accelerate requests of investment and issue license for establishing corporations.
3. Managers of Golestan province need to help producers reach their goals by providing necessary expenditures for marketing researches and by taking right decisions, setting foreign marketing strategy.
4. Managers of Golestan province need to take field of human forces into account. Removing cultural obstacles regarding partnership of women in working market needs to be taken into account seriously. Also wide illiteracy and lack of an advanced industrial basis is a problem which should be solved through training human forces and through holding technical and professional trainings.
5. Introducing relative merits of Golestan province on behalf of managers for those who demand investment is a key and effective approach in growth of partnerships in areas, since investment in the area indicates reduction of finished price of products and can be useful level for using value added.
6. Success of Golestan province depends on economic security of Iran in terms of geographical special position which should be focused through rules and regulations. Every country should create a stable condition for activities of private sector by employing legal and institutional system. And it needs to provide condition for attracting investment moreover providing security and reducing investment risk and strengthening motivations.

7. Allocating budget to the province from public funds of Iran in order to build infrastructure facilities and vast investment

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