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### Modeling the Factors Affecting the Nuclear Negotiations of Iran in 5+1 with the Fuzzy Approach: Structural Equations

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#### Abstract

The nuclear deal between Iran and the P5+1 countries in Vienna on July 14, 2015, is considered a historic day in the history of international relations. The success of the nuclear negotiations between Tehran and the P5+1 countries is an example of the importance and persistence of international politics and diplomacy and will be the basis of stability in the region, and this agreement can be described as a victory for diplomacy. Considering these issues, the purpose of this research is to model the factors affecting Iran's nuclear negotiations in P 5+1.

This study is in the field of descriptive-survey research of the correlational type and according to the purpose and topic

of the research, it is practical and cross-sectional in terms of time. This research has been determined by the use of snowball sampling among experts in the field of nuclear negotiations in 2021. Moreover, based on the type two fuzzy method and partial least squares method of the research model, the following results were obtained; individual resources 0.441, role resources 0.485, government variables 0.76, social changes 0.593, international variables 0.573, the internal environment variable 0.582, informal influential groups 0.834 and unilateral and multilateral sanctions as much as 0.149, influenced nuclear negotiations.

**Keywords:** Nuclear Negotiations, P5+1, Sanctions, Structural Equations

#### 1. Introduction

The nuclear activities of the Islamic Republic of Iran are one of the most important challenges that has overshadowed the relations between the Islamic Republic of Iran and the six major world powers (Including the United States, Russia, France, England and China as permanent members of the UN Security Council, in addition to Germany) in a twelve-year period. This issue became controversial when the People's Mojahedin Organization (Manafiqin) published the satellite images that were provided to it by Western spy agencies. This group claimed that Iran is pursuing a secret nuclear program (Agence France-Presse, August, 14, 2002).

Pausing, rolling back and dismantling were three strategies that were on the agenda of the great powers from the first day; as Obama, the former president of the United States, said clearly about the JCPOA in order to convince his opponents: "For the first time in more than a decade, we have stopped the progress of Iran considering the nuclear program. We not only made sure that they don't add more centrifuges in Fordo and Natanz, but they have to return their 20% enrichment to the previous state" (Mehr News, December, 8, 2013).

However, this issue has always resulted in the reaction of the Iranian authorities. The Islamic Republic of Iran has always paid attention to its nuclear rights, including the complete fuel cycle, within the framework of the Non-Proliferation Treaty (Sadaosima News Agency, September, 20, 2013).

The nuclear issue is considered as one of the longest international disputes outside the relations of great powers, after the Cold War era. The six world powers are directly involved in it, which is considered significant from this point of view. Sanctions applied against Iran in the nuclear issue have directly or indirectly affected not only the country's economy but also many other countries.

The nuclear crisis is a part of Iran's contemporary history, and its diplomatic, security and economic consequences are very

wide. The scientific study of the policy-making process not only gives actors the opportunity to issues to a large extent, but also provides the basis for analyzing the future behavior of decision-makers with a small error coefficient.

The purpose of this research is to examine the most important factors affecting Iran's nuclear negotiations in P5+1, which led to the JCPOA agreement after two years. Moreover, taking advantage of its positive and negative experiences in similar subjects is one of the main goals of this research.

## 2. Theoretical Framework

In the analysis of the foreign policy of the governments in the international system, there are various theories, some of them consider it more appropriate to use two levels of micro and macro analysis, and in fact, they are looking for a bridge to connect these two levels. One of the most important theorists who, by presenting his foreign policy theory as well as the foreign policy continuity model, provided the ground for connecting the two levels of micro and macro analysis, is James N. Rosenau. In this regard, at the level of microanalysis, he pays attention to the four factors of the individual (individual personality of decision makers), role, government variables, and social factors, and to these factors, he has added the important factor of the international environment at the macro level (Rosenau, 1971)<sup>[15]</sup>.

**Individual Resources:** The unique inherent and acquired characteristics of decision-makers and elites are one of the important factors influencing how the foreign policy of governments is formed and oriented in the arena of the international system.

**Role Resources:** The role variable means that government officials, regardless of their individual and exclusive characteristics, which were mentioned in the individual variable, react to issues based on their position and situation in the government.

**Governmental variables:** This variable refers to government structural aspects. The complex structure of a government, the relations of intra-governmental organizations, and finally, the experts and specialists within an organization, compile and present proposals and general lines of decision-making in foreign policy, and no decision-maker is able to make a decision without these considerations. The Islamic Republic of Iran, which is a semi-parliamentary, semi-presidential system, has a special and sometimes unique structure compared to other countries. The role of the people through the elections of the president and representatives of the Islamic Council provides the ground for more or less correcting the process of nuclear negotiations.

**Social variable:** This variable basically includes all the non-governmental aspects of a society that are involved in the process of making foreign policy decisions. The values governing a national society, influential and pressure

groups, media, and other things are included in this format.

**International variables:** This variable includes environmental and international events, constraints and possibilities that occur outside of society and government and limit or condition the foreign policy options of governments and their decision-makers (Resenau, 1971)<sup>[15]</sup>.

**Internal environment variable:** The internal variable includes non-governmental aspects, public opinion and value orientations. At this level of analysis, in examining the nuclear policy, one should pay attention to the value orientations of the Iranian people towards having full nuclear rights even at the cost of enduring sanctions. In expressing different levels in the analysis of foreign policy, in addition to the micro levels, Resenau also considers the role of environmental and external factors in the form of environmental possibilities and restrictions as an effective level of analysis (Ataei and RasouliThaniabadi, 2009).

**Informal influential groups:** Parties, pressure groups, media and informal institutions play a special role in persuading or criticizing the government regarding the type of nuclear policy of the 11th government.

**Unilateral and multilateral sanctions:** Economic sanctions against the Islamic Republic of Iran were one of the tools of coercive diplomacy of the United States of America to persuade and limit the strategic power of the Islamic Republic of Iran (Berman, 2012)<sup>[13]</sup>. The most prominent of these sanctions include confiscation of property and assets of Iranian individuals and organizations abroad, trade sanctions, export and import and investment, energy-related sanctions, financial sanctions and assets of Iranian individuals and organizations, and international sanctions. Therefore, the effects of these sanctions in the short, medium, and long term not only caused pressure on the country's financial system but also caused a decrease in investment, slow growth and increased inflation. The pressure of environmental factors, which was manifested in extensive foreign sanctions, caused the 11th government to prioritize efforts to cancel sanctions. The reaction of the countries or international organizations that are the main players in the nuclear case against Rouhani's victory in the presidential election was welcomed. The United States of America, Britain, France, China and Russia, which are permanent members of the UN Security Council, and Germany, which was considered one of the negotiating parties since the beginning of the controversy over Iran's nuclear activities, are included in this group. These countries claim that due to Hassan Rouhani's declared policies for resuming negotiations, "creating limitations, clarifying and removing concerns in the nuclear field", will delay Iran's acquisition of an atomic bomb (Agence France-Presse, June 15, 2013)<sup>[3]</sup>. Thus, in this research, although the effect of internal variables on nuclear policy is considered; but the component of the surrounding environment was also mentioned, due to the role of the guest in the framework of Resenau's theory.

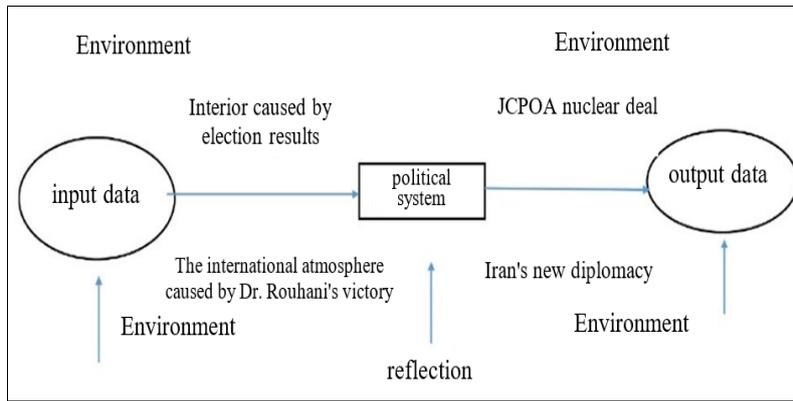


Chart 1: Systemic model of decision

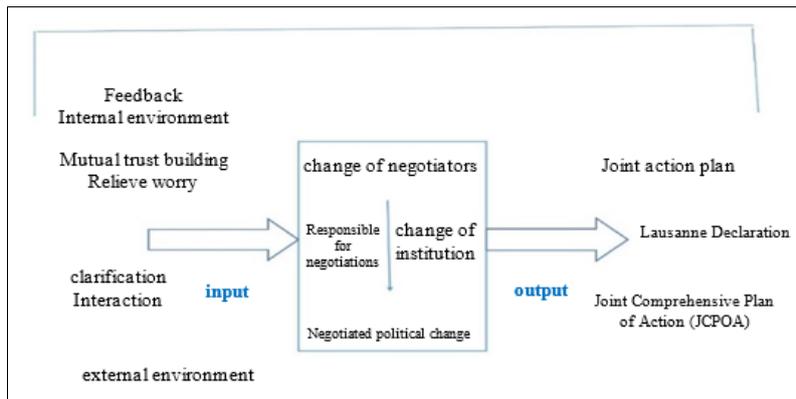


Chart 2: Effective components in the systemic model of nuclear policy

**3. Research method**

This research is carried out with a descriptive approach and environmental analysis, and to validate the findings, expert opinions were obtained through the distribution of questionnaires.

The proposed model, of course, needs to be validated. The Delphi method was considered for this issue. In the Delphi method, the number of samples required to cite depends on the purpose of the study. If the purpose of the study is to test hypotheses, at least six samples are needed. If the purpose of the documents is to explore and describe the texts, according to the available time and resources, the number of (10 ± 5) samples will be sufficient for the analysis of the texts (Kvale, 1996) [14]. In this research, since there was a need to test the hypothesis with five Resenau components, 16 samples were sufficient. Thus, after the formation of the initial model which is based on the five mentioned components, the data was compiled in the form of a 31-item questionnaire. The validity and reliability of this questionnaire, which includes the influence of the individual component (education, experience, language, etc.), role and position (President, Ministry of Foreign Affairs, National Security Council, etc.), system structure (semi-presidential, semi-parliamentary), social variables (elections, etc.) and international environment were confirmed. The international environment includes the reception of international institutions (UN Security Council and International Atomic Energy Agency) and powerful global and regional countries including America, Russia, France, England, Germany, China, Turkey, Saudi Arabia, etc.

In the second step, experienced and knowledgeable people were chosen. In addition, an effort was made to ensure that the criteria for selecting people were in accordance with the

subject of the research and the model under investigation. The items that were considered in this context included the following items: related academic field, having useful experiences, authoring and translating books, publishing scientific articles and expressing opinions in the field of nuclear negotiations, and employment in a field that is related to the topic of the research, etc. The questionnaire was sent to about 16 of the relevant experts, considering the theoretical adequacy, the issue continued until reaching the saturation stage, which included 12 people. In the questionnaire, the experts chose the influence of each component from among the options "very much", "much", "low", "very little" and "not at all". The research process is presented in chart (3):

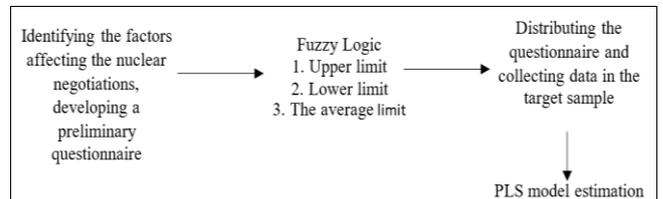


Chart 3: Research process

**A: Fuzzy type two**

In the theory of probability, all the information about a random uncertainty is expressed by a probability density function, and by determining the mean and the dispersion around the mean, the minimum necessary information is obtained from the probability density function by the variance; a type-2 fuzzy set also provides this amount of dispersion (variance) around a linguistic uncertainty to provide more information than a simple membership degree

in the face of linguistic uncertainties. In fact, the type-1 fuzzy set is the first-order approximation of uncertainty and the type-2 fuzzy set is the second-order approximation of uncertainty. The membership function is a three-dimensional type-2 fuzzy set. In order to have a visualization of that drawing of the two-dimensional

domain, which is called the effect of uncertainty (FOU) of the type-2 membership function, the following diagram is presented. In figure number (4); the effect of uncertainty is bounded by an upper membership function (UMF) and a lower membership function (LMF) (J. M. Mendelpp. 2007).

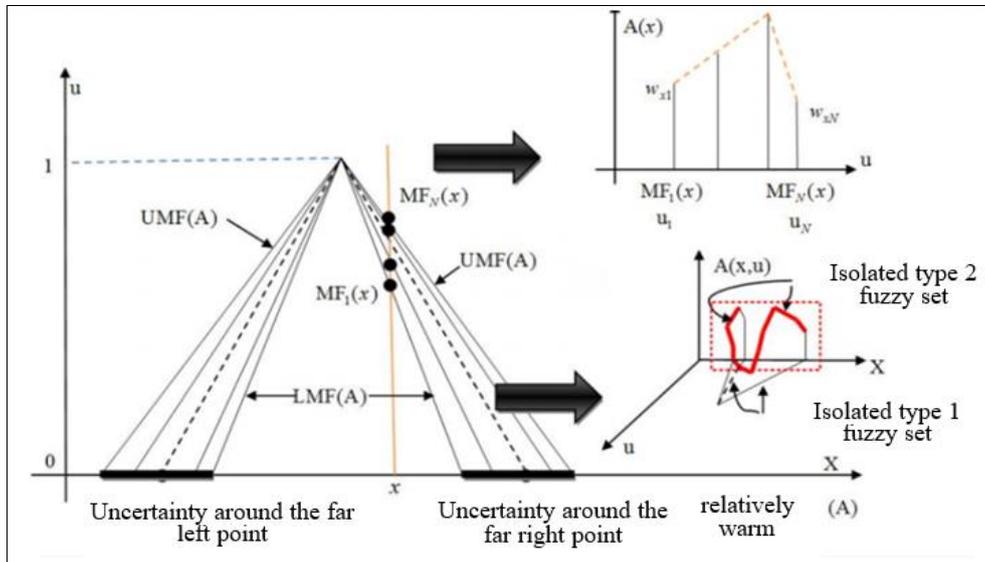


Chart 4: Membership function of type 2 fuzzy set

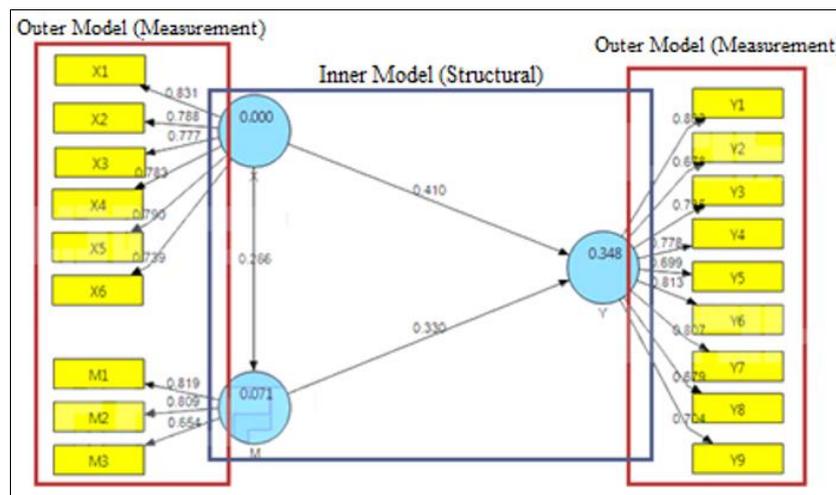


Chart 5: Partial least squares approach

**B: Partial least squares technique**

Partial Least Squares is a non-parametric method that is a suitable substitute for the structural equation model. The partial least squares method is less sensitive to the sample size and does not require the data to be normal. The partial least squares model can be separated into two outer models and inner models.

**Outer Model:** The Outer Model shows the relationships between items (questionnaire questions) and factors (hidden variables) and is equivalent to the confirmatory factor analysis or measurement model in Lisrel and Amos software.

**Inner Model:** The Inner Model is similar to path analysis

and the structural part of a structural equation model. After testing the external model, it is necessary to present the internal model that indicates the relationship between the hidden variables. By using the internal model, it is possible to examine the research hypotheses of the model.

**4. Estimation of the model**

This section consists of two main parts. In the first part, the results of the fuzzy 2 methods will be presented, in the second stage, the structural equations between the research variables are presented. Before entering the model, it is necessary to introduce the research questionnaires.

**Table 1:** Questionnaire questions

Row	Variable	question number	Number of items
1	Individual resources	4-3-2-1	4
2	Role resources	8-7-6-5	4
3	Governmental variables	12-11-10-9	4
4	Social variable	16-15-14-13	4
5	International variables	18-17	2
6	Internal environment variable	21-20-19	3
7	Informal influential groups	25-24-23-22	4
8	Unilateral and multilateral sanctions	27-26	2
9	The result of the nuclear negotiations	31-30-29-28	4

**Fuzzy method**

In this section, based on the opinions collected from the experts, the criteria for measuring the indicators affecting the outcome of the nuclear negotiations were identified as follows. In the fuzzy method, these indicators will represent our xj.

**Computability:** An index should be computable in addition to being useful. An index even if it is a useful index based on theoretical foundations; without the ability to calculate, it will not be practically useful.

**Ability and ease of access to data required for calculation:** Even if a criterion has the ability to calculate, but there is no ability to collect data to calculate it, it will not be a desirable measure. In this criterion, the goal is the applicability of the information in the desired activity and it refers to the amount of data transferred.

**Accuracy of a criterion:** If a criterion is not accurate in predicting, it will not be practically useful, and even its use can sometimes be unhelpful and mislead decision makers.

**Comprehensibility:** A criterion must be comprehensible; this index makes decision-makers know when and where to use each indicator and to achieve what purpose. At the same time, all the experts of that field should have a common opinion about an index and avoid personal opinions.

**Affordability of data collection required for calculation:** This index refers to the dimension of financial cost and opportunity cost of calculating the measurement of an index, in other words, how useful a measure can be in conveying information about the role of the indicator in the outcome of nuclear negotiations.

**Data value:** A criterion should have data value beyond the above criteria and a new perspective on the company's situation can be created by collecting data about it.

**Analyzability:** A criterion must have the ability to analyze. Analyzability means that the increase or decrease of the criterion can analyze the future state of the company.

**Applicability of the index:** This criterion refers to the degree of relevance of the criterion in order to achieve the

desired goals. In other words, the ability of the criterion is the applicability of the transmitted information in the intended purpose and does not refer to the volume of the transmitted information.

**Table 2:** Criteria for measuring factors affecting the outcome of nuclear negotiations

Row	Factor	Number of experts
1	Ability to calculate	15
2	Ability and ease of access to data required for calculation	15
3	Accuracy of a criterion	15
4	Comprehensibility	14
5	Affordability of data collection required for calculation	8
6	Data value	7
7	Analyzability	6
8	Applicability of the index	16

**Source:** Researcher's calculations and experts' opinion

Based on the results of table 2, criteria that are lower than or equal to the average of 5 are removed. As a result, indicators of the ability to calculate the index, accessibility of data, comprehensibility, accuracy of the index in predicting the role of the outcome of nuclear negotiations, and applicability of the index will be used as the main criteria for prioritizing the investigated indicators. Finally, based on Electre's method, we will prioritize the effective factors in the role of the index of the outcome of nuclear negotiations. The following table is based on the information of 16 questionnaires that were selected from the elites active in discussing the outcome of the nuclear negotiations. In this table, the average opinions of these 16 experts are considered as the input data of the fuzzy logic method (Buckley 1985 suggested method). Based on the opinion of experts and the determined criteria, we have determined the upper and lower limits for each of the criteria using the fuzzy model.

**Table 3:** Fuzzy matrix results

facto rs	Ability to calculate			Ability and ease of access to data required for calculation			Comprehensibility			Accuracy of a criterion			Applicability of the index		
	Upper limit	lower limit	avera ge	Upper limit	lower limit	average	Upper limit	lower limit	average	Upper limit	lower limit	avera ge	Upper limit	lower limit	avera ge
x1	0.39	0.38	0.385	0.09	0.06	0.075	0.32	0.45	0.385	0.52	0.29	0.405	0.24	0.22	0.23
x2	0.25	0.07	0.16	0.46	0.15	0.305	0.41	0.55	0.48	0.04	0.03	0.035	0.25	0.24	0.245
x3	0.07	0.03	0.05	0.1	0.05	0.075	0.4	0.58	0.49	0.43	0.53	0.48	0.39	0.35	0.37
x4	0.06	0.11	0.085	0.3	0.17	0.235	0.15	0.09	0.12	0.54	0.53	0.535	0.43	0.54	0.485
x5	0.3	0.06	0.18	0.05	0.17	0.11	0.29	0.35	0.32	0.3	0.27	0.285	0.6	0.27	0.435
x6	0.42	0.1	0.26	0.01	0	0.005	0.43	0.42	0.425	0.21	0.3	0.255	0.52	0.55	0.535
x8	0.19	0.02	0.105	0.42	0.07	0.245	0.17	0.31	0.24	0.34	0.15	0.245	0.13	0.33	0.23
x10	0.19	0.12	0.155	0.04	0.24	0.14	0.3	0.25	0.275	0.63	0.51	0.57	0.24	0.19	0.215
x11	0.45	0.19	0.32	0.35	0.51	0.43	0.19	0.26	0.225	0.07	0	0.035	0.25	0.03	0.14
x12	0.17	0.01	0.09	0.39	0.54	0.465	0.29	0.25	0.27	0.15	0.17	0.16	0.08	0.05	0.065
x15	0.16	0.31	0.48	0.04	0.25	0.17	0.04	0.16	0.31	0.48	0.04	0.25	0.17	0.04	0.13
x16	0.05	0.08	0.49	0.48	0.37	0.20	0.32	0.05	0.08	0.49	0.48	0.37	0.20	0.32	0.08
x17	0.09	0.24	0.12	0.54	0.49	0.18	0.18	0.09	0.24	0.12	0.54	0.49	0.18	0.18	0.19
x18	0.18	0.11	0.32	0.29	0.44	0.19	0.08	0.18	0.11	0.32	0.29	0.44	0.19	0.08	0.38
x19	0.26	0.01	0.43	0.26	0.54	0.06	0.10	0.26	0.01	0.43	0.26	0.54	0.06	0.10	0.28
x20	0.11	0.25	0.24	0.25	0.23	0.38	0.08	0.11	0.25	0.24	0.25	0.23	0.38	0.08	0.19
x21	0.16	0.14	0.28	0.57	0.22	0.07	0.12	0.16	0.14	0.28	0.57	0.22	0.07	0.12	0.18
x22	0.32	0.43	0.23	0.04	0.14	0.49	0.05	0.32	0.43	0.23	0.04	0.14	0.49	0.05	0.45
x23	0.02	0.02	0.08	0.32	0.05	0.00	0.01	0.02	0.02	0.08	0.32	0.05	0.00	0.01	0.08
x24	0.41	0.39	0.40	0.13	0.07	0.10	0.35	0.49	0.42	0.52	0.29	0.41	0.26	0.24	0.25
x25	0.26	0.07	0.16	0.47	0.15	0.31	0.44	0.59	0.52	0.07	0.07	0.07	0.28	0.27	0.27
x26	0.07	0.04	0.06	0.12	0.06	0.09	0.41	0.59	0.50	0.47	0.57	0.52	0.42	0.39	0.41
x27	0.08	0.11	0.10	0.30	0.18	0.24	0.17	0.12	0.14	0.56	0.55	0.56	0.48	0.56	0.52
x29	0.33	0.07	0.20	0.05	0.17	0.11	0.32	0.38	0.35	0.32	0.29	0.30	0.64	0.31	0.48
x30	0.43	0.10	0.27	0.04	0.01	0.02	0.44	0.44	0.44	0.24	0.31	0.27	0.53	0.58	0.55
x31	0.20	0.03	0.12	0.42	0.09	0.26	0.19	0.33	0.26	0.39	0.19	0.29	0.15	0.34	0.25

Source: Researcher's calculations

Then, by using the concepts of fuzzy logic, in order to defuzzification the decision matrix, the method of the center of area 2 with the following relation has been used, for the reason that it does not require the personal judgment of the analyst. Because in some research, the lower or upper limit is the criterion of investigation, and in some research, the average of these two limits is the criterion of the researcher's decision, with the following formula; the researcher's personal judgment is practically removed from the model.

$$Center\ of\ area\ of\ triangular\ fuzzy\ number = CA = \left( \frac{(\beta - \alpha) + (m - \alpha)}{3} \right) + \alpha$$

In the above relation, alpha is the lower limit, beta is the upper limit and M is the mean of the fuzzy numbers. After calculating the decision-making definite matrix and the non-fuzzy matrix, we will enter the results considering Electre method type three. Due to the wide dimensions of the stated matrices, the results of these matrices have been avoided.

**Structural equation method**

In this section, it is necessary to develop an optimal model. Questionnaires have been used to ensure the validity of the questionnaire; Cronbach's alpha coefficient and composite reliability were also used to evaluate the reliability of the questionnaire (Table 4).

**Table 4:** Validity and reliability index

Index	Cronbach's Alpha	Factor Load
Individual resources	0.907	0.926
Role resources	0.825	0.909
Governmental variables	0.857	0.886
Social variable	0.898	0.812
International variables	0.855	0.833
Internal environment variable	0.878	0.809
Informal influential groups	0.986	0.825
Unilateral and multilateral sanctions	0.819	0.904
The result of the nuclear negotiations	0.756	0.887

Considering that Cronbach's alpha coefficient is above 0.7 and the factor loading index is above 0.3, as a result, the research indicators have high validity and reliability.

In order to estimate the relationship between research variables based on partial least squares, it is necessary to establish the relationship between variables based on the theoretical foundations presented in the research. Before estimating the final model, we estimated the model without creating a relationship between the research questions, which is shown in the diagram below; But it was observed that the error rate of the model is around 9%; therefore, using the editing feature provided by the Smart PLS software, we made the final estimate of the model and considering that the error of the estimated model reached

below 5 percent, this result was achieved; applying new communication has improved the results. According to the results, all the variables included in the model have appropriate factor loadings, so their presence in the model has statistical justification.

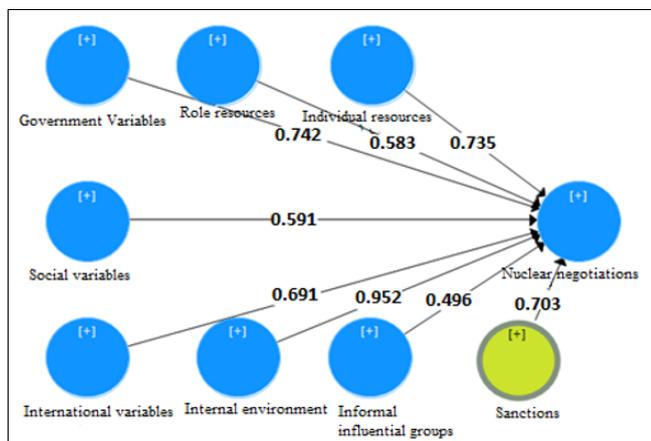


Chart 6: Factorial load diagram of the variables

Now, according to the justification of the presence of the desired variables in the model, the question that comes to mind refers to the fact that, how much does each of the questions affect the studied indices? In order to answer this problem, the graph of normalized coefficients is presented in the next section.

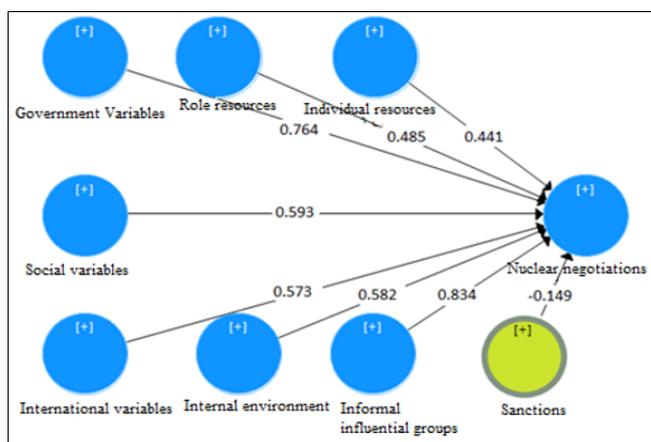


Chart 7: Standardized coefficients of questions

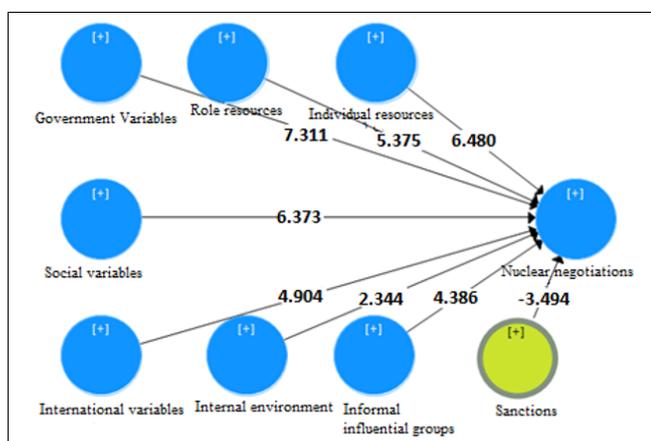


Chart 8: Significant coefficients based on t-statistics

In the following, after determining the effectiveness of research variables, we will investigate the significance of research variables based on t-statistics. The significance of the coefficient means the real relationship between the research variables. In chart (7), the t-statistics of each question and the relevant criteria are presented.

To what extent does the model compiled based on the theoretical framework and experience match the reality? And to what extent does the collected data support the model that has been formulated in terms of theory? The above-mentioned questions are of the most important discussions in the field of fitting the data to the model. Acceptable scientific criteria for validating the theoretical model compiled using the collected data constitute the main discussion in "model fit indices". In the following, based on the results, the goodness of fit indices of the model is presented in table (5):

Table 5: Goodness of fit indices of the model

	Coefficient of explanation	Modified coefficient of explanation
SRMR Index	0.045	0.044
GFI	0.897	0.929

Considering the GFI index (above 70%) and the root mean square error of approximation (less than 8%), the model is at a favorable level in terms of goodness of fit indices. According to the level of Fisher's statistic, which was obtained as 5.8, the mentioned sanctions moderate the relations between variables affecting the allocation of nuclear negotiations.

5. Conclusion

Based on the type two fuzzy method and partial least squares method of the research model, the following results were obtained; individual resources 0.441, role resources 0.485, government variables 0.76, social changes 0.593, international variables 0.573, the internal environment variable 0.582, informal influential groups 0.834 and unilateral and multilateral sanctions as much as 0.149, influenced nuclear negotiations. Considering that the many factors affect nuclear negotiations, having a systemic perspective in decision-making should be on the agenda of policymakers. On the other hand, the understanding resulting from it may not be made quickly by the opposite countries; as a result, Iran must act carefully in this field in line with its obligations.

6. References

1. Yazidi Jahanbakhsh. Diplomacy of the Islamic Republic of Iran: Foreign policy, nuclear energy, Tehran: Abrar Tehran Contemporary, 2010.
2. Pourahmadi Hossein. Modern Diplomacy: Essays in the Foreign Policy of the Islamic Republic of Iran. Tehran: Study Office of the Ministry of Foreign Affairs, 2010.
3. Agence France-Press. The accusation of opponents of the Iranian government regarding Tehran's nuclear activities, August 14, 2013. Available at: www.afp.com.
4. Dehghani Firouzabadi Jalal. Foreign policy of the Islamic Republic of Iran, Tehran: Samt Publications, 2010.
5. Dehghani Firouzabadi Jalal, Mehdi Atai. Nuclear

- discourse of the 11th government, *Strategic Studies Quarterly*. 2014; 17(1):117-193.
6. Rasouli Sanibadi Elham. Iran's nuclear issue: A review of existing views and literature, *Foreign Policy Quarterly*. 2012; 26(3):606-585.
  7. Rouhani Hassan. National Security and Nuclear Diplomacy, Tehran: Expediency Recognition Forum, Strategic Research Center, 2012.
  8. Rouhani Hassan. Nuclear Unsaid in Mehrnameh's Conversation with Dr. Hassan Rouhani, *Mehrnameh Magazine*. 2013; 2(2):p34.
  9. Rouhani Hassan. Promotional Documentary of the Presidential Elections, Channel 1, Radio and Television of the Islamic Republic of Iran, 2013.
  10. Joint Comprehensive Plan of Action document (JCPOA), Tehran: Ministry of Foreign Affairs, 2014.
  11. Atai Farhad, Elham Rasouli Thaniabadi. Examination of the role and position of foreign policy in international relations theories, *Policy Quarterly*. 2010; 40(3):209-226.
  12. Maleki Abbas. Decision-making process in Iran's foreign policy, *Strategy Quarterly*. 2003; 11(27):107-181.
  13. Berman Ian. The Kremlin's Iran Problem. Washington: American Foreign Policy, June 18, 2012.
  14. Kvale Steinar. *Inter Views: An Introduction to Qualitative Research Interviewing*. SAGE Publications, 1996.
  15. Rosenau James. *The scientific study of foreign policy*. New York: The free press, 1971.