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Surveying the Efficiency of Parliamentarians' Suggestion about the Allocation of Credit to Eliminate Deprivation by Using the AHP Approach

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Abstract

Deprivation and elimination of deprivation from different regions of the country to achieve sustainable development is one of the important issues in Iran. Therefore, the country's budget structure needs to be reformed. The purpose of this research is to evaluate the special view of the Islamic Consultative Assembly towards deprived areas in the amendment of the plan for eliminating deprivation, note 14 of the budget laws of the year 2022, using Data Envelopment Analysis (DEA) method. Since the decision-making units are the provinces of Iran, we have used the output-oriented CCR model to determine the efficiency of design modification, and then we have ranked it with the MAJ model. We have also determined important indicators in the allocation of credit to eliminate deprivation in provinces by using the AHP approach. Therefore, it is suggested that the note of this table should be deleted based on the text presented in a double-urgency plan agreed upon by main factions of the Parliament, and its credit should be distributed according to valid deprivation indicators. As well as this, we suggest that the requirements of each region should be met based on the latest statistics and relevant information.

Keywords: Elimination of Deprivation, Data Envelopment Analysis, Evaluation, Efficiency, Ranking

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Introduction

The standard of living of people in some areas is lower than in other areas due to the lack of facilities, and it has seen no proper growth. The reason for this can be found in the adoption of inappropriate planning methods and lack of attention to the effects of these planning methods on the economic system as well as lack of attention and handling of the increasing trend of centralization, etc. However, regional differences have existed and have been theorized for a long time. Budget is the most important and effective tool that can be used to determine policies and priorities as well as to plan, modify, adjust, and control various activities. Therefore, the correct recognition of this tool and performance evaluation are an issue that has always been of interest since the introduction of classical management theories. Data Envelopment Analysis (DAE) is one of the most useful techniques in the field of performance measurement. This method is a nonparametric approach that uses mathematical programming models to measure the relative efficiency of decision-making units (DMUs). Since its introduction in 1978 by Charnes, Cooper and Rhodes, this technique has been developed from the theoretical and practical aspects and has spread to various fields of science due to its unique characteristics [7]. The main idea in the formation of DEA was to provide a technique to identify the best performing units among a set of similar units [8]. The development of societies is accompanied by the expansion of organizations, which necessitates the need for efficient resource allocation systems as well as control and planning mechanisms. This makes budgeting move from traditional methods to new and advanced methods, which are based on scientific research. The use of mathematical models became widespread especially with the emergence of planning-programming-budgeting system (PPBS) in 1965 and the approach of zero-based budgeting (ZBB) in 1973. Between 1920 and 1935, more emphasis was placed on cost monitoring, and budgets were used solely as a means of control. At this stage, the budget was prepared based on materials and cost. Despite this, in the planning-program-budgeting system, a lot of attention is paid to planning and at the same time to management and supervision. The ideal form of planning is centralized and responsibilities are delegated to lower ranks. In this period, Dantzig improved the linear programming method in a completely practical way, and even methods related to game theory and simulation were used [2]. In the last two decades, several mathematical models have been presented regarding budgeting and financial planning. In Iran, Azar presented the main budgeting models in governmental organizations [4]. Persistence of major economic differences between regions, for long periods of time, leaves destructive effects on the efficiency of the national economy. In addition, such differences may have unfortunate results in terms of politics and society. A look at the extensive connection of the elimination of deprivation with other sectors of the economy shows that any movement to eliminate deprivation can affect various economic sectors of the country, and at the same time developments in various economic sectors affect the elimination of deprivation. In the year 1400, according to the approvals of the Islamic Consultative Assembly, about 19.3 thousand billion tomans of resources were allocated from the appropriations for the targeted subsidies, in the table of Note 14 of the budget law of the year 2021, to eliminate deprivation in less privileged areas. Also, in Table 17 of the budget law of the year 1400 and under the heading of removing deprivation from less privileged areas, each province's share of these funds was determined. According to the surveys carried out in 2021, the Plan and Budget

Organization of the Islamic Republic of Iran has defined 5600 projects related to this credit in the important areas of education, health, water and roads in deprived and underprivileged areas, and the share of this credit for each city has been determined based on the regulatory index of the Plan and Budget Organization for deprived areas. In the budget law of 1401, once again with the approval of the Islamic Consultative Assembly and for the continuation of the elimination of deprivation, the amount of 22 thousand billion tomans from the sources of Note 14 of the budget law has been allocated to this matter; with the difference that only a part of the resources has been allocated to cities and the rest has been allocated to executive bodies. The equivalent of 3.1 thousand billion Tomans from these resources has been divided equally among 31 special deprived cities (one city from each province that was determined by the National Security Council during the last years and has not been updated since then). In the plan "Amendment of Table 4-24 of the elimination of deprivation, note 14 of the Budget Law of 1401 of the Whole Country", a proposal to change the approach of allocating 3 thousand billion Tomans, which has been allocated to special deprived cities, to the equal distribution of provincial budget credits has been presented. In this plan, instead of allocating credit to cities, credit is given to Provincial Planning Councils and distributed among deprived cities based on the index developed by the deputy president for eliminating deprivation.

1.1 Text of the Commission's proposal and report

The text of the double-urgency plan

Single-subject bill: Row 8 of Table 4-24 about the elimination of deprivation (Resources and Expenditure Tables, note 14) in the 1401 Budget Law of the whole country is amended as follows:

For each of the country's provinces (31 provinces), an amount of one thousand billion Rials (one hundred billion Tomans) is specially allocated for the elimination of deprivation. Based on the opinion of the assembly of representatives of the province and after review in the planning council of the province, considering the indicators of deprivation provided by the president's deputy of deprived areas, this money will be given to the Plan and Budget Organization of the province to be distributed in the whole province in proportion to the deprivation of each city.

Note — Clauses 1, 2 and 3 in Table 4-24 of the elimination of deprivation (Resources and Expenditure Tables, note 14) related to the budget law of the year 1401 of the whole country are also deleted.

After the survey carried out by the Commission on Planning, Budgeting and Calculations, the assigned plan was changed, and according to the final text, after the approval of the Provincial Planning and Development Council and the City Planning Committee, 3 thousand billion Tomans was allocated to be spent on the preparation and implementation of rural improvement projects and asphalting of village roads. The Housing Foundation of the Islamic Revolution and village assistance bureaus were responsible to handle this project.

Planning Committee, was allocated to be spent on the preparation and implementation of rural improvement projects and asphalting of village roads with the responsibility falling on the Housing Foundation of the Islamic Revolution and village assistance bureaus.

The DEA methodology was primarily developed to evaluate the relative efficiency of similar production and service systems (Charnes, et. al, 1978).

However, Adolphson et al. (1991) stated that a more comprehensive approach to this methodology can be adopted and applied to compare any homogeneous set of units with multiple dimensions. This comprehensive approach was first used by Thomson et al. in 1986 to determine the appropriate location for telecommunications equipment in the state of Texas. These authors considered six potential locations for this equipment and used triple inputs to evaluate these locations and assumed the output of each location to be equal to unit (1). Due to the fact that the fixed output has no effect on the relative efficiency of the units, after that, Adolphson et al. tried to solve this placement problem as a model with only input and no output. After them, two researchers, Lovel and Pastor, examined these series of models and explained their evolution. It is noticeable that the radial models without input (output) are mentioned only in the envelopment form.

1. Theoretical foundations used in the research

2.1 radial models without input (output) in DEA

The DEA methodology was primarily developed to evaluate the relative efficiency of similar production and service systems (Charnes, et. al, 1978) [7]. Due to the fact that the fixed output has no effect on the relative efficiency of the units, Lovel and Pastor tried to solve this placement problem as a model with only input and no output, and they examined these series of models and explained their evolution. Since these radial models without input (output) are mentioned only in the envelopment form, in this paper, using the CCR model with a fixed input, which is a purely output-oriented model and basically turns into a BCC model without input (because one of the constraints with a fixed input becomes a convexity constraint), the effectiveness of 2deprivation in the provinces of Iran is determined. And then, we rank them with the MAJ model and continue to interpret the results and outputs of the models.

In this paper, we assume that we have n decision-making units, each of which consumes m inputs to produce s outputs. Now assume that $X_j = (x_{1j},\ldots,x_{mj})^T$ and $Y_j = (y_{1j},\ldots,y_{sj})^T$ be the input and output vectors of the j th decision-making unit $(j = 1,\ldots,n)$, respectively. When we consider a DEA model without input (output), we mean an output-oriented and/or an input-oriented model. Here, consider the output-oriented CCR model with unit inputs and the victor of outputs to evaluate DMU_k :

$$\begin{aligned} \max \quad & \varphi \\ \text{s.t.} \quad & \sum_{j=1}^{n} \lambda_j Y_j \geq \varphi Y_k \\ & \sum_{j=1}^{n} \lambda_j = 1 \\ & \lambda_j \geq 0,\ j = 1,\ldots,n \end{aligned} \tag{1}$$

It is easy to see that this model is the same output-oriented CCR model without input.

2.2 MAJ Ranking Model

According to some problems in the ranking model introduced by Anderson and Peterson (AP model) [12], Mehrabian et, al in 1999 [14] proposed a non-radial model, called MAJ model, for ranking decision-making units in order to solve the problems of the AP model. This model to evaluate DMU_k is as follows:

$$\begin{aligned} \min \quad & 1 + w \\ \text{s.t.} \quad & \sum_{\substack{j=1 \\ j\neq k}}^{n} \lambda_j X_j \leq X_k + \mathbf{1}w \\ & \sum_{\substack{j=1 \\ j\neq k}}^{n} \lambda_j Y_j \geq Y_k \\ & \lambda_j \geq 0,\ j = 1,\ldots,n,\ j \neq k \end{aligned} \tag{2}$$

2.3 Analytic hierarchy process technique

One of the most popular and practical multi-criteria decision-making methods is the Analytical Hierarchy Process (AHP) technique. This method was first invented by Thomas L. Saati in 1980. This technique is used when a decision is involved with several competing options and multiple criteria. The proposed criteria can be qualitative or quantitative. This decision-making method is a widely used pairwise comparison method. The decision maker starts by providing a hierarchical decision tree. The hierarchical decision tree shows the factors compared and the competing options evaluated in the decision. Hierarchical decision tree is a multi-level tree in which the objective of the problem is at the first level, competing options are at the last level, and criteria are at the intermediate levels. The decision maker then makes a series of pairwise comparisons. In pairwise comparisons, options and criteria are compared together. The above technique can also be used to calculate the weight and importance of indicators. The methods of calculating the weight in the AHP process are as follows [5]:

1- Least Squares Method
2- Logarithmic least Squares Method
3- Eigenvector Method
4- Approximate Methods

2. The selection of input and output variables

Perhaps the most important step in using the DEA technique to measure the relative efficiency of any company or institution is to choose appropriate and homogeneous inputs and outputs. For this, all aspects of the available inputs and outputs should be examined. According to the interviews conducted with experts, similar internationally approved articles in this field, the existing literature in the research, and with the help of the AHP method, the criteria or the outputs of the current research (Evaluation of the performance of the budget allocated to the elimination of deprivation among deprived cities in the whole country) have been selected as follows:

(a) Evaluation from the perspective of the Constitution
(b) Evaluation of credit governed by the Housing Foundation of the Islamic Revolution
(c) The need to pay attention to the half-finished projects of the elimination of deprivation in the year 2021.
(d) The need to pay attention to different dimensions of deprivation
(e) Failure to pay attention to the indicators of deprivation in the manner of credit distribution
(f) Lack of integration in the planning for the elimination of deprivation
(g) Ambiguity in the agents' execution of the law
(h) Valid deprivation indicators and the requirements of each region based on the latest statistics and relevant information.

Constitutional assessment according to the interpretive theory of 78/21/5146 of the Guardian Council, it is not possible to change the budget figures in the form of a plan, in a way that affects the entire budget, according to Article 52 of the Constitution. However, changing the budget figures in a way that does not affect the entire country's budget is not considered to be against the constitution.

Evaluation of Islamic Revolution Housing Foundation credits based on Article 7 of the charter of the Housing Foundation of the Islamic Revolution, this organization is responsible for preparing rural improvement projects and improving roads in villages through the credit approved by the government, with the

coordination of relevant institutions and the participation of local people. Rural improvement projects are projects that, while organizing and modifying the existing structure, determine the extent and location of future expansion and the usage of land for various residential, commercial, agricultural, etc. functions as well as transportation, general needs, and facilities in rural areas. The objective of rural improvement projects in relevant regulations are as follows:

(a) Creating conditions for development and construction of villages according to cultural, economic and social situations.
(b) Equitable provision of services through the creation of social, productive and welfare facilities.
(c) Directing the physical aspects of the village
(d) Creating the necessary facilities to improve houses for villagers and environmental and public services

In the budget law of the year 2021, the credit allocated to the Housing Foundation of the Islamic Revolution in order to be spent on the preparation and implementation of rural improvement projects are as follows:

- 2 thousand billion tomans from Islamic financial bonds in paragraph (Z) of Note 5
- 59 billion tomans for the improvement of villages in paragraph (T) of Note 11
- 95 billion tomans for the Housing Foundation of the Islamic Revolution

In the budget law of the year 2022, the credit allocated to the Housing Foundation of the Islamic Revolution are as follows:

- The amount of 2 thousand billion tomans for rural water supplies and rural road constructions and the revival of canals and the rural improvement projects (portion 3 of paragraph (T) of Note 5)

The amount of 1100 billion tomans from Table 10 of provincial construction credit

Based on this, allocating the mentioned resources to the Housing Foundation of the Islamic Revolution means a significant increase in the credit of this institution in the year 2022 compared to the budget law of the year 2021.

The need to pay attention to the half-finished projects of the elimination of deprivation in the year 2022 In Row 35 of Note 14 of the budget law of the year 2021, about 19.3 thousand billion tomans was considered to eliminate deprivation in less privileged areas, which in the year 2021 was spent on the implementation of about 5,600 deprivation removal projects across the country. According to the report of the Plan and Budget Organization, many projects started with this credit were not completed in 2021. In this regard, in order to prioritize and complete these projects as quickly as possible and use them, further credit should be allocated by the Parliament.

The need to pay attention to different dimensions of deprivation and poverty have different dimensions. Although the implementation of the rural improvement projects and modifying the existing structure of villages are important dimensions of the elimination of deprivation, access to appropriate educational and health services, water supply and energy distribution networks, etc. are also other dimensions of poverty and deprivation. Some areas may be severely deprived based on these indicators and face serious problems in providing drinking water or sanitation. Therefore, first of all, it is necessary to determine the type of deprivation in each deprived region or city, and prioritize the credit for that region. For example, if the deprivation in an area is due to the lack of access to drinking water, the credit for the elimination of deprivation should be spent with a higher priority on creating access to the water network. Therefore, if the credit

of this row is spent only on rural improvement projects or rebuilding of village roads, the areas that are deprived in other dimensions cannot use this credit in an appropriate way. Finally, the effectiveness of this credit in the elimination of deprivation will decrease.

Failure to pay attention to the indicators of deprivation in the manner of credit distribution in the Commission's report, according to Table 10 of the budget law, the credit is divided equally among the provinces, which can be a problem due to the different level of deprivation in each province. Also, the method of distribution of intra-provincial credits has been left to the Planning and Development Council of the province and the City Planning Committee without setting a specific indicator. However, the reason for allocating deprivation removal credit is to provide a certain indicator of deprivation, based on which the deprived provinces and cities are ranked and this rank is the criterion for credit distribution. In the absence of the definition of the deprivation indicators, it is not possible to identify the most deprived provinces and cities, which will lead to ambiguity in decision-making and the waste of deprivation credit. Although there are uncertainties regarding some of the current indicators of less developed regions, the equal distribution of credit between provinces can cause damage to the most deprived provinces.

Lack of integration in the planning for the elimination of deprivation global experiences show that one of the prerequisites for success in the elimination of deprivation is to focus on integrated plans and prioritization of their implementation. If a central institution is in charge of planning this credit, it can prepare a proper prioritization of all the projects in progress at the country level, so that through this prioritization the mentioned credit are allocated to the projects in a more efficient way. Also, a single planning institution can have a more detailed and comprehensive monitoring of the projects being implemented in the whole country, which is higher than the executive and supervisory capacity of village assistance bureaus mentioned in the text of the plan.

Ambiguity in the agents' execution of the law one of the issues that can cause problems in the implementation of the laws is ambiguity in the agents' execution of the law. According to the Commission's report, agents to implement the laws have not been explicitly determined, and Housing Foundation of the Islamic Revolution and village assistance bureaus are jointly responsible.

Considering population indicators in the distribution of credits in Table 4-24 in paragraphs 1, 2, and 3 of the specified notes in Table 4-24, Note 14 of the budget law of the year 1401, the distribution of Rows 1 to 7 of these credits is based on the urban, rural, and student population indicators. However, smaller urban and rural populations live in deprived areas, which is due to the concentration of poverty and the lack of access of households to a suitable infrastructure. In fact, with the increase in the deprivation of a region, a part of the population living in that region migrates to other regions and a smaller population remains. If the population of these areas is considered as an indicator of the distribution of credits specified to eliminate deprivation, severely deprived areas with a smaller population will receive less credit and may remain in the deprivation trap. Therefore, it is suggested that the note of this table should be deleted based on the text presented in a double-urgency plan agreed upon by main factions of the Parliament, and its credit should be distributed according to valid deprivation indicators. As well as this, we suggest that the

requirements of each region should be met based on the latest statistics and relevant information.

3. The results of BCC model without input, AHP and MAJ ranking model

In this research, there are 31 decision-making units with two outputs, as shown in Table (1):

O1- Less developed regions, based on Article 32 of the Permanent Sentences of the Country Development Plans law;

O2- The budget for balancing various issues regarding the law of balanced use of the country's facilities and fair distribution in order to eliminate discrimination and to upgrade the level of less developed areas.

Therefore, using GAMS software, we determine the efficiency of these decision-making units with two outputs through the BCC model without input. Then, we rank these units with the MAJ model. The results are shown in Tables (2) and (3).

Based on Table (3), the unit of Row 16 is efficient and its efficiency value is equal to one. Inefficient units are ranked by using MAJ model scores. Therefore, in order to optimize the allocation of deprivation removal credit, more credit should be allocated to Sistan and Baluchestan province than the other ones.

Table (1) comparing the provinces' share of benefits based on different indicators

Province	Equal Distribution between Provinces	O2	O1
East Azerbaijan	3.2	3.7	2.6
West Azerbaijan	3.2	4.4	1.5
Ardabil	3.2	1.9	1.6
Isfahan	3.2	3.4	1.4
Alborz	3.2	1.9	0.1
Ilam	3.2	1.8	1.8
Bushehr	3.2	2	3.1
Tehran	3.2	2.7	0.1
Chaharmahal and Bakhtiari	3.2	1.6	1.6
South Khorasan	3.2	2.4	2.7
Razavi Khorasan	3.2	4.7	8.3
North Khorasan	3.2	2.3	1.9
Khuzestan	3.2	6.1	6.8
Zanjan	3.2	1.4	1.8
Semnan	3.2	1.2	0.4
Sistan and Baluchestan	3.2	8.4	10.3
Fars	3.2	6.4	8.4
Qazvin	3.2	1.4	1.4
Qom	3.2	1	0.04
Kurdistan	3.2	3.9	5.5
Kerman	3.2	6.4	6.4
Kermanshah	3.2	3.5	3.1
Kohgiluyeh and Boyer-Ahmad	3.2	2.6	1.6
Golestan	3.2	3	2.9
Gilan	3.2	3.9	1.9
Lorestan	3.2	4.4	4.3
Mazandaran	3.2	4.4	1.5
Markazi	3.2	1.6	1
Hormozgan	3.2	4.2	4.3
Hamadan	3.2	2.1	2
Yazd	3.2	1.6	0.6

Table (2) efficiency of the BCC model without input

Row	Province	Efficiency Score
1	East Azerbaijan	2.2703
2	West Azerbaijan	1.9091
3	Ardabil	4.4211
4	Isfahan	2.4706
5	Alborz	4.4211
6	Ilam	4.6667
7	Bushehr	3.3226
8	Tehran	3.1111
9	Chaharmahal and Bakhtiari	5.2500
10	South Khorasan	3.5000
11	Razavi Khorasan	1.2410
12	North Khorasan	3.6522
13	Khuzestan	1.1977
14	Zanjan	5.7222
15	Semnan	7.0000
16	Sistan and Baluchestan	1.0000
17	Fars	1.2262
18	Qazvin	6.0000
19	Qom	8.4000
20	Kurdistan	1.8727
21	Kerman	1.3125
22	Kermanshah	2.4000
23	Kohgiluyeh and Boyer-Ahmad	3.2308
24	Golestan	2.8000
25	Gilan	2.1538
26	Lorestan	1.9091
27	Mazandaran	1.9091
28	Markazi	5.2500
29	Hormozgan	2.0000
30	Hamadan	4.0000
31	Yazd	5.2500

Table (3) the rank of units according to the MAJ model

Row	Region	MAJ Model Score	Rank
1	East Azerbaijan	0.4405	12
2	West Azerbaijan	0.5238	9
3	Ardabil	0.2262	22
4	Isfahan	0.4048	14
5	Alborz	0.2262	23
6	Ilam	0.2143	24
7	Bushehr	0.3010	18
8	Tehran	0.3214	16
9	Chaharmahal and Bakhtiari	0.1905	25
10	South Khorasan	0.2857	19
11	Razavi Khorasan	0.8058	4
12	North Khorasan	0.2738	20
13	Khuzestan	0.8350	2
14	Zanjan	0.1748	28
15	Semnan	0.1429	30
16	Sistan and Baluchestan	1.0000	1
17	Fars	0.8155	3
18	Qazvin	0.1667	29
19	Qom	0.1190	31
20	Kurdistan	0.5340	6
21	Kerman	0.7619	5
22	Kermanshah	0.4167	13
23	Kohgiluyeh and Boyer-Ahmad	0.3095	17
24	Golestan	0.3571	15
25	Gilan	0.4643	11
26	Lorestan	0.5238	7
27	Mazandaran	0.5238	8
28	Markazi	0.1905	26
29	Hormozgan	0.5000	10
30	Hamadan	0.2500	21
31	Yazd	0.1905	27

The results of the AHP model are as follows:

In the first step, the matrix of pairwise comparisons of the indicators is given in table (4).

Table (4) the Matrix of pairwise comparisons

Indicators	a	b	c	d	e	f	g	h
a	1	9	9	9	9	9	9	9
b	0.111	1	7	5	5	3	9	9
c	0.111	0.143	1	5	3	5	7	3
d	0.111	0.2	0.2	1	5	3	7	5
e	0.111	0.2	0.333	0.2	1	3	5	3
f	0.111	0.333	0.2	0.333	0.333	1	7	7
g	0.111	0.111	0.143	0.143	0.2	0.143	1	5
h	0.111	0.111	0.333	0.2	0.333	0.143	0.2	1

The equal importance of the indicators leads to a significant increase in regional inequality and also the lack of credit allocation to remove the deprivation among provinces. With this assumption, the province that is weak in less important indicators is placed in the same rank as the province that is weak in more important indicators and gets the same credit. In this research, by obtaining opinions from experts and rejecting the assumption that the indicators are the same, we have been able to determine the importance and weight of these indicators as follows:

Table (5) — the importance and weight of the indicators

Row	Indicators	Weight
1	Evaluation from the perspective of the Constitution	0.341
2	Valid deprivation indicators and the requirements of each region based on the latest statistics and relevant information	0.208
3	The need to pay attention to the half-finished projects of the elimination of deprivation in the year 1400	0.129
4	need to pay attention to different dimensions of deprivation	0.114
5	Failure to pay attention to the indicators of deprivation in the manner of credit distribution	0.068
6	Lack of integration in the planning for the elimination of deprivation	0.087
7	Ambiguity in the agents' execution of the law	0.036
8	Evaluation of credits governed by Housing Foundation of the Islamic Revolution	0.0129

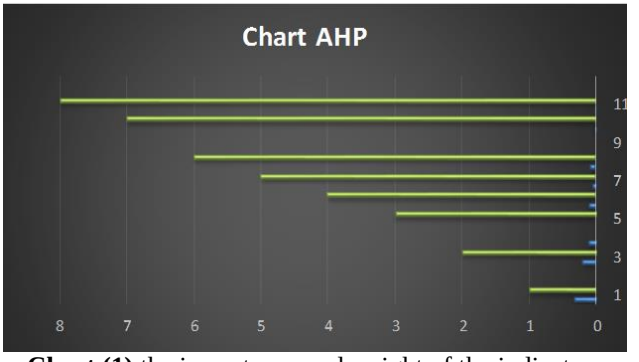

Chart (1) the importance and weight of the indicators

In order to judge the importance of the indicators by experts, the AHP method was used, and for this purpose, the chart of the importance and weight of the indicators was prepared in the form of Chart (1).

The issue is that, according to the set of restrictions and points mentioned, the credit to eliminate deprivation in the country of Iran should be allocated among the provinces in such a way that considers the importance and weight of the evaluation indicators from the perspective of the constitution as well as the valid deprivation indicators and requirements of each region based on the latest statistics and relevant information. As a result, this approach reduces inequality. Accordingly, the method presented in this article is a suitable model that takes into account the restrictions and other factors, as well as the opinion and resourcefulness of decision makers and managers. These restrictions include limitations on credit assigned to different provinces, the degree of development of cities, and budget laws. The opinion and resourcefulness of decision makers and managers also include the priorities in appropriations as well as their opinion about the importance and weight of the indicators used in the mentioned model.

4. Interpretation of Results

The need to realize social justice and reduce inequalities and decentralization is one of the important duties of the government, which is clearly stated in the documents of the sixth development plans. In order to reduce inequalities, the ranking model in Table (3) can be used, which leads to identify provincial differences and provides a mathematical method for allocating credit to various provinces of Iran. More importantly, with so little precision in Tables (2) and (3), we come across this important and fundamental point that more credit to eliminate deprivation should be allocated to two provinces of Sistan and Baluchestan and Khuzestan, and we can also see that the rank of other provinces has been determined. According to the results obtained from this research, increasing the efficiency of deprivation removal credit should be in a way that improves productivity based on the available resources and capacities. Chart (2) shows the rank of decision-making units.

5. Results

In expressing the results of this research, as mentioned, the efficiency of parliamentarians' suggestion regarding the amendment of the plan for eliminating deprivation, note 14 of the budget laws of 1401, was surveyed by evaluating previous studies on this area and library research through the use of Data Envelopment Analysis (DEA) method. As we can see from Table (3), three provinces of Sistan and Baluchestan, Khuzestan, and Fars are the most deprived regions and they have applied for more deprivation removal credit compared with the other provinces. Finally, according to the points raised and according to the report by the Islamic Parliament Research Center, it is suggested that the Commission's report should be reviewed from the viewpoint of the mentioned cases. In this regard, for the purpose of increasing the efficiency of deprivation removal credit, it is suggested that:

- The aforementioned resources should not be allocated only to the rural improvement projects; and according to the evaluation of the Provincial Planning and Development Councils and the City Planning Committees, it must be possible to allocate a part of these resources to complete the half-finished projects started in the year 1400.
- According to Paragraph (y) of Note 19 of the budget law of the year 1401, the Plan and Budget Organization should be able to update or modify the indicators and the share of each province from the credit determined in Paragraph (t) of Article 32 of the Permanent Sentences of the Country Development Plans law within two months after the approval of this law. Paragraph (t) of Article 32 of the Permanent Sentences of the Country Development Plans law states that the government is obliged to allocate 3 percent of the income from the expert of crude oil and natural gas to gas-rich and oil-rich provinces (one-third), where the share of each province is determined based on the share of that province in the value of crude oil and natural gas exports, and to the cities of less developed regions (two-thirds), which are determined by the Plan and Budget Organization based on underdevelopment indicators.
- The Plan and Budget Organization should be obliged to continuously report the allocation percentages and the physical progress of the projects to the Program, Budget, and Accounting Commission of the Islamic Consultative Assembly, and

additionally credit should be allocated in a step-by-step method and based on the progress in projects.

- The notes presented in the initial text of the plan must also be approved by the Islamic Consultative Assembly.

The proposed text: the text of Row 8 of Table 4-24 about the elimination of deprivation (Resources and Expenditure Tables, note 14) of the 1401 Budget Law of the whole country is amended as follows. The credit of the column of Note 14 about the elimination of deprivation in the provincial Table (10-G) is distributed based on the updated indicators of less developed regions mentioned in Article 32 of the Permanent Sentences of the Country Development Plans law at the city level. The credit verified based on the approvals of the City Planning Committee should be allocated to the Housing Foundation of the Islamic Revolution in order to be spent on the preparation and implementation of rural improvement projects and asphalting of village roads as well as to relevant institutions mentioned in Rows 1 to 7 of this table to complete the plans and projects for eliminating deprivation in cities.

Note — Clauses 1, 2 and 3 in Table 4-24 of the elimination of deprivation (Resources and Expenditure Tables, note 14) related to the budget law of the year 1401 of the whole country are also deleted.

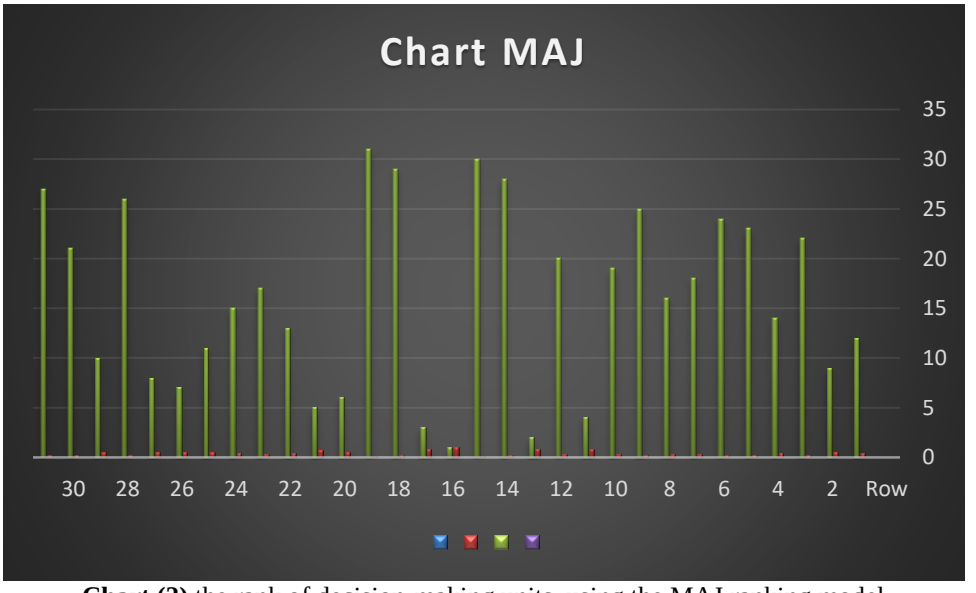

Chart (2) the rank of decision-making units, using the MAJ ranking model

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