Abstract

The political influence Coefficient as a power of influence and political elite lobbying (the power rents) of each region in the decision-making and national budget allocations centers is a new word through which the present article, after introducing it, is able to rank the provinces in the tenth state using the multi-criteria decision-making models (MCDM). This issue is important in terms of social justice and its role in development. For this purpose, based on the key national management posts in the form of a set of three main governmental branches: the execute one (President, first vice president, vice presidents, minister, central bank governor, chairman of the Red Crescent), the legislature (the speaker of Parliament, the members of the parliament), judiciary (Head of the Judiciary, Chairman of the Assembly of Experts, Attorney General, Head of the Supreme Court, Head of Expediency council), and the head of IRIB broadcasting that totally comprise 14 indices, the provinces are ranked by Topsis Model. According to the rankings, Tehran and Ilam have the most and least political influence of the total 31 provinces of the country in the tenth state, respectively.

Keywords: Rents, Political Influence Coefficient, Ranking of Provinces, Power Rents, Iran, Tenth State.

JEL Classification: R28, R58, Z28.

1. Introduction

The political influence Coefficient as a factor that can be effective in advancing the political, social and economic goals of a country and its region, has a very important role in social justice and development
The political influence coefficient of the provinces in the … which so far has been omitted from domestic and foreign researchers at this level. The new word introduced in this study, considered as an important new indicator in national planning, contains the semantic load of the two words "influence" and "power". These two words are used interchangeably with the same meaning, but in principle, they have different concepts. The influence coefficient, as a new word, is a combination of both: influence means having the right and ability to lead and command, while power means the possibility to materially force another to obey and subordination. Or, in other words, influence means power in leadership and has the spiritual semantic load, Power has the semantic load of material abilities (Abo Ahmad, 2011: 4).

The influence coefficient indicator, based on the political game of senior managers, can create inequalities in the growth of the regions. Therefore, the relation between power and politics can be considered a mutual relationship whose effective regional actions will lead to a national-level distribution of resources. According to introduction presented regarding the influence coefficient indicator, the bargaining and lobbying power and in other words the power rents of provinces at the center of decision making can be determined by obtaining a number for each province. Based on this, the status and impact of each region and province in national decision making and planning can be prioritized. Han Arendt considers the power of having and creating the ability to reach an agreement in free communication (Villa, 1997: 73) that can be gained through political games. Or it can generally be said that Policy on its own is an attempt to gain power (SeifZadeh, 2002: 169).

The importance of the subject matter of this research is in the fact that measuring how the distribution of the elite management of each region in the country’s management and the planning system can be obtained and the concept of managerial distribution (Equal – unequal) in the tenth state can be objectified. As it is understandable, an effective factor in development is the equal distribution of resources which is usually supervised by the economic perspective. But the equal distribution of human capital in power centers is more important which has not been addressed so far, and it still remains neglected in discussing the development of the parts of this important issue. Given the importance and capacity of policy making in the formulation of
forthcoming macro plans and the assignment of macro management responsibilities based on the share of each region of power, the present study tries to extract the power of influence and bargaining and the lobbying of each region for the tenth state, continuing with the introduction of the regression model and the formation of the corresponding matrix to obtain the influence coefficient indicator, which is a function of the 14 independent variables as the factors influencing each province in the center of power for each province using MCDM. These indicators can be used to rank the provinces of the country in terms of the rents of power in the center. It is believed that in the future research, the power rents can be compared with the concept of the development of regions and tested the impact of such an indicator in terms of solidarity.

2. Review of Literature

The elites of each province in any managerial positions at a macro level, as human capitals, are working to advance their developmental goals in order to develop their own regions. According to the nationalist sense of the hometown of the region, most of them will have political lobbies which, in turn, will increase the growth of development indicators for the regions. Now this important issue as the most important key to the development of the regions is of great importance which justifies and explains the current research for national development policies and politicians' attention in national planning. The influence coefficient that can be considered as a power rent in the development of the regions is a term that will further illustrate the role of political economy in the regions. Political economy focuses on explaining issues that reflect the relationship between political power and economic necessities in a society. Therefore, the "subject of political economy" is a discussion of how the relationship between the field of politics and the field of economics is and its "goal" is to provide social, political, and historical analyzes of economic processes. However, the objective of economics is to provide more purely economic analysis of these processes (Clark, 2010: 12). BubertKiman says that the economy is the political economy where actors exercise power on each other. Even more solid statements can be found in the works of some radical
economists who believe that the economy (especially the capitalist market economy) is a power system.

Perhaps, from the public viewpoint, politics is defined as an independent science and in the form of purely political theories. But if you look more closely at the issue of developing the regions, the changes in the planning system are highly visible under the influence of political games and the contribution of political lobbies to many things, including the economy, is irrefutable. That is why the existing economy adapted from political exchange distinguishes a different meaning from the political economy. The political economy focuses on how the distribution of the authority of the mixing of values can be accomplished in a variety of socio-cultural and strategic fields (Mosalanejad, 2015: 295).

Politics, along with many other disciplines in the country's executive affairs, is very important for development and the mere perspective the economy cannot be considered a factor for the development of a country. Therefore, with the advent of the term political economy, the tension and the impact of this trend on the role played by development at the general level is of great importance. The issue of political economy from the 1930s, when the "welfare state" was organized in the United States got an effective place in the development and growth program of different countries. Therefore, the arrangement of key nodes in the planning system can be one of the hallmarks of the state. In this way, the government must not only maintain a central role in its international political economy but must also have an effective place in regulating the equation of power, prosperity, production and employment within the internal structure of the countries (Barqlameh, 2006: 72). As the national institution, the government has the most impact on resource allocation, but institutions influencing government decisions are the same factors affecting the influence rate. North and Thomas (1973) define the institution as an agreement between economic units which determines the methods of cooperation or competition between units. In this way, political institutions composed of interest groups and stakeholders, act as planners and implementers of distribution documents for community resources. Political institutions, when used in the economy, can be used as proper exchange targets, exchange-guiding
rules, and property rights, and specify both the interests and obligations. The political aspects of political institutions are based on their origins in the state and in the use of power, authority, and guarantees of the practice of behavior and prescribing it in their field of competence such as the relationship between politics and power and, consequently, the planning of the country from other angles outside the geographic and economic logic of the regions.

The post-revolutionary governments in Iran have enjoyed the distinctive features of rentier governments (Hatami, 2007: 160-165; Maloney, 2015: 5-16), That is, the distinctive feature of development in the regions was rents and based on the present paper, the origins of this rentier are macroeconomic positions that illustrate the role of political economy in development in Iran. In other words, economic relations have political reasons and roots (Hatami et al., 2017: 86). It is worth noting that it has already been argued in the political economy literature between the state's social base and economic orientation (Bussier & Mulder, 1999) and these arguments reflect the prevailing class demands. Ultimately, the economy affected by political factors (key posts at the macro level) can be interpreted as the main components of political economy which can itself explain the changes in society.

In general, political institutions are shaped from the cornerstones of political development whose role in development on the basis of the knowledge system of each country within the framework of transparent and transnational law must be able to manifest the meaning of development, And the development of these institutions gives rise to political development, which in itself forms the overall development of the country. Political development has different meanings, according to Renald Chickook's political development theory, three perspectives for political development can be mentioned.

1. The group who consider the political development a synonymous with democracy
2. The group that focuses on political change and development
3. The group who follow up stages of political development and crisis analysis (Fallahi, 2017: 15)

The first category study the issues of elections, pluralism, multi-party political systems, systematic legal authority, competitive
political system, press freedom, economic development and political legitimacy as indicators of political development.

The second category relates to change and political development and involves social conflicts and the ups and downs and changes in societies and the changes that human society needs. Fredricks, Louis Cooper, Robert Nissab are among the researchers in this category.

The third category, which can be found by their scholars, LeonorardBanider, JamiesMcman, Lapalmobada, Sidney, and Rabbah, is more focused on social functions as development factors. It is possible to consider the ways of dividing the power of competition for power and the ways in which the ruling factions have access to issues and crises of political legitimacy for their thoughts for political development (Sarieolqalam, 2001: 105-106).

3. The Power Rents and Development

The development of regions can result from an increase in the number of influential managers in the key positions of the country with their lobbies. Indirectly, it can be stated that political games as the main drivers of development lead to the creation of equality gaps in the regions. The emerging power in this way is considered a political power that Morgenthala defines it as the political power refers to the existence of control over the interactions between the holders of public authority and between public authority and the general public. He also defines power as: “Power comes from the ability of man to act on others' minds and actions”, If local forces can do so, they will have a rented power for developing regions through their position.

Based on concepts alongside power, we come to the correct conclusion when there is no compulsion for others to behave, people freely choose. Thus, we call this a direct impression of direct benefit or interest and sometimes they have called it mental advantage (Fiathman, 1966; Balhas, 1971) or misery (Lukes, 1974).

In his economics book, Marx Weber defines the power community as a potential to which an actor is in a social relation in a position whose will, despite the resistance, is based on the perceived basis on which the probability rests (Weber, 1976: 53).

With these interpretations, power rents in the form of political influence can lead to the development of regions, and the influences of
politics and economics on one another is irrefutable. Politics and economics have different effects, for example, pressure groups on economic decisions can have a lot of effect or the pressure of political parties-and stakeholders-can change the annual budget trends of the country (Dadgar, 2005: 5).

3.1 The political influence Coefficient and Justice
In the international community, justice, as the most important factor in the role of development, getting its place in the 1970s, in which all social values, freedom and income opportunities, wealth, and the foundations of self-esteem should be equally distributed. Although the uneven distribution of each of these values, or all of them, is in the interest of all (Rawls, 1971:62). At the current stage, development is not considered merely as economic growth and labor, and today it is known as the development of equality of management distribution and power as one of the components of development because the main goals of development are justice and increasing the efficiency (Sarrafi, 2000).

4. The Research Background
Multi-criteria decision-making methods (MCDM) are models that are ranked as the most popular for science and research and also are used when decision makings are taken more than one decision-makers' criterion. This method is divided into two parts of multi-objective decision making (MODM) and multiple Attribute Decision Making (MADM). The most important methods of multi-criteria decision making are the simple weight average, Topsis, Modified Main Component Analysis, Taxonomy and modified deviation method from the optimal amount which is used to assess the regional development level of the provinces. The present study ranked the country's provinces in terms of power rents by borrowing from the multi-criteria decision -making models. The multi-criteria decision making (TOPSIS) is one of the most widely used decision-making methods. These methods improve the quality of decisions and evaluations through the transparent, logical and efficient decision making processes (Wang and Triantaphyllou, 2008: 45). Multi-criteria decision making can be considered in two categories of methods: non–
compensatory model and compensatory model. The present study uses the compensatory model. In the criteria or indices of the compensatory model, unlike the indices of non-compensatory model, small changes to an index are compensated by another indicator. In general, the exchange is allowed for these types of indices.

5. The Research Model

\[ Y_{it} = \sum \alpha \cdot f(x_{ijt}) \]

The variable \( Y_{it} \) is a dependent variable of the political influence coefficient and \( \alpha \) is the weight of the independent variables, \( x_{ijt} \) is the factor influencing and creating the power rents of each area in the center of decision making affecting the dependent variable in which \( i \) stands for province, \( t \) stands for time and \( j \) stands for the indicator (independent variables) that are in the country \( i = 31 \), \( t = \) the tenth state and \( j = 14 \).

The regression model is composed of the following coefficients of political influence or power rents as dependent variable, and 14 variables of the three governmental branches of the country, and the head of IRIB broadcasting are as follows.

The political influence Coefficient= President + the number of vice presidents + first vice president + minister + chairman of the legislature + head of the judiciary + the members of parliament + the head of IRIB broadcasting+ chairman of the Assembly of Experts + Head of the Expediency Council + President of the Supreme Court + Head of the Red Crescent + the Attorney General+ Head of Central Bank

5.1 Algebraic Model

Matrix Model: (Political Impact coefficient Matrix of each province)
Table 1: Political Impact coefficient Matrix of each province

<table>
<thead>
<tr>
<th>The indicator</th>
<th>The province</th>
</tr>
</thead>
<tbody>
<tr>
<td>((\alpha_1)(\alpha_2)(\alpha_3)(\alpha_4)(\alpha_5)(\alpha_6)\ldots(\alpha_N)(F_1)(F_2)(F_3)(F_4)(F_5)(F_6)\ldots(F_N))</td>
<td>(X_{11}X_{12}X_{13}X_{14}X_{15}X_{16}\ldots\ldots X_{1n})</td>
</tr>
<tr>
<td></td>
<td>(X_{21}X_{22}X_{23}X_{24}X_{25}X_{26}\ldots\ldots X_{2n})</td>
</tr>
<tr>
<td></td>
<td>(X_{31}X_{32}X_{33}X_{34}X_{35}X_{36}\ldots\ldots X_{3n})</td>
</tr>
<tr>
<td></td>
<td>(X_{m1}X_{m2}X_{m3}X_{m4}X_{m5}X_{m6}\ldots\ldots X_{mn})</td>
</tr>
</tbody>
</table>

The aim of the above model, which is estimated separately for each province, is to extract a quantitative numeric value for each province using MCDM model and then ranking is possible based on the extracted numbers. This ranking of the provinces represents the position of political influence and the bargaining power of that province in the country.

In general, the process and method of doing it can be obtained according to the following steps:

Step 1: Creating a decision-making Matrix
Step 2: normalizing or scaling out the matrix
Step 3: Weighing normalized matrix
Step 4: Identifying the Positive and Negative Ideal Solution
Step 5: Determining the distance from the Positive and Negative Ideal Solution
Step 6: Ranking of Provinces in terms of political influence due to the proximity to the positive solution and avoidance of the negative solution

6. The Topsis Method
The Topsis method as one of the non-compensatory methods of multi-criteria decision making was proposed by Huang and Yun in 1981 and it is known as one of the most famous and top-notch multi-criteria decision-making methods. In this method, after formulating a matrix with n options and m indices, we can judge about ranking and choosing the best option. Assuming that each index is incremental, this method is based on choosing the option with the greatest distance
from the negative ideal solution and the least distance to the positive ideal solution in which A stands for the negative Ideal Solution and A+ stands for the positive ideal solution.

"The distance between an option of positive ideal (or negative ideal) may be calculated as the Euclidean distance (from second power) or as the sum of absolute magnitudes from linear intervals (known as block intervals) Which depends on the exchange rate and the replacement rate among the indices "(Asqarpour, 2005: 260).

If you choose the best option according to the relevant index or ranking, they should follow the steps below:

6.1 Topsis Method Algorithm
By establishing the decision-making matrix, the share of each province is calculated from the number of key managers in the country's decision-making center, and after the following steps, it is possible to prioritize the coefficient of political influence or power rents of the provinces of the country.

The first step is to scale out and convert the decision-making matrix quantitatively, which is used to scale out the following formula:

\[ n_{ij} = \frac{r_{ij}}{\sqrt{\sum_{i=1}^{m} r_{ij}^2}} \]

The second step is to multiply the scaled out matrix (N) in the weight diagonal matrix (W) (Available weights are based on the Delphi technique).

\[ V = N \times W_{n\times n} \]

In the above formula N is a scaled out matrix of indices and \(W_{n\times n}\) is the diagonal matrix where the elements of the main diameter are non-zero.

The third step is to identify the best positive ideal solution \(V_j^+\) and negative ideal solution \(V_j^-\) at this stage.

Identify the best positive ideal solution \(V_j^+\) and negative ideal solution \(V_j^-\) calculated as follows:
The positive ideal option $A^+$:

$$\{ (\max V_{ij} \mid j \in J), (\min V_{ij} \mid j \in J) \mid i = 1, 2, ... m \}$$

$$= \{ V_1^+, V_2^+, ..., V_J^+, ..., V_n^+ \}$$

The negative ideal option $A^-$:

$$\{ (\min V_{ij} \mid j \in J), (\max V_{ij} \mid j \in J) \mid i = 1, 2, ... m \}$$

$$= \{ V_1^-, V_2^-, ..., V_J^-, ..., V_n^- \}$$

Or, that is: the best values for the positive index are the largest values and for the negative indicators, are the smallest values and the "worst" for the positive indicators are the smallest values and for the negative indicators are the largest values.

The fourth step: The distance of each option from the positive and negative Ideal: At this point, the Euclidean distance of each option from positive ideals $d_i^+$ and Negative Ideal ($d_i^-$) must be calculated according to the formulas below:

$$d_i^+ = \sqrt{\sum_{j=1}^{n} (V_{ij} - V_j^+)^2}, \quad i = 1, 2, ..., m$$

The distance of i option from negative option:

$$d_i^- = \sqrt{\sum_{j=1}^{n} (V_{ij} - V_j^-)^2}, \quad i = 1, 2, ..., m$$

The fifth step: At this point, relative distance and proximity $CL_i^*$ of each option relative to the Ideal solution can be calculated according to the following formula:
\[ CL^*_i = \frac{d_i^-}{d_i^- + d_i^+} \]

The closer the option to the idol solution is the closer the numeric value of \( CL^*_i \) to the number one.

The sixth step: The final stage is given the outputs obtained from the previous steps for each option, any option that has more \( CL^*_i \), is better and will be prioritized.

After the above steps, the status of Iran's provinces in the 10th state is as follows in terms of the index of political influence:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Provinces</th>
<th>Ranking value</th>
<th>Rank</th>
<th>Province</th>
<th>Ranking value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tehran</td>
<td>0.4522</td>
<td>17</td>
<td>SistanBalochestan</td>
<td>0.1402</td>
</tr>
<tr>
<td>2</td>
<td>Isfahan</td>
<td>0.3964</td>
<td>18</td>
<td>Kermanshah</td>
<td>0.1402</td>
</tr>
<tr>
<td>3</td>
<td>East Azerbaijan</td>
<td>0.3615</td>
<td>19</td>
<td>Markazi</td>
<td>0.1399</td>
</tr>
<tr>
<td>4</td>
<td>Khozestan</td>
<td>0.3427</td>
<td>20</td>
<td>Qom</td>
<td>0.1359</td>
</tr>
<tr>
<td>5</td>
<td>Semnan</td>
<td>0.3279</td>
<td>21</td>
<td>Golestan</td>
<td>0.1255</td>
</tr>
<tr>
<td>6</td>
<td>Fars</td>
<td>0.2978</td>
<td>22</td>
<td>West Azerbaijan</td>
<td>0.1184</td>
</tr>
<tr>
<td>7</td>
<td>Mazandaran</td>
<td>0.2976</td>
<td>23</td>
<td>Yaz</td>
<td>0.1111</td>
</tr>
<tr>
<td>8</td>
<td>Kordestan</td>
<td>0.287</td>
<td>24</td>
<td>Hormozgan</td>
<td>0.0457</td>
</tr>
<tr>
<td>9</td>
<td>Kerman</td>
<td>0.2647</td>
<td>25</td>
<td>Zanjan</td>
<td>0.0457</td>
</tr>
<tr>
<td>10</td>
<td>Hamedan</td>
<td>0.2539</td>
<td>26</td>
<td>South Khorasan</td>
<td>0.0389</td>
</tr>
<tr>
<td>11</td>
<td>RazaviKhorasan</td>
<td>0.2458</td>
<td>27</td>
<td>North Khorasan</td>
<td>0.0329</td>
</tr>
<tr>
<td>12</td>
<td>CharMahalBakhtiari</td>
<td>0.2108</td>
<td>28</td>
<td>Qazvin</td>
<td>0.0329</td>
</tr>
<tr>
<td>13</td>
<td>Ardebil</td>
<td>0.207</td>
<td>29</td>
<td>Boushahr</td>
<td>0.0264</td>
</tr>
<tr>
<td>14</td>
<td>Alborz</td>
<td>0.1658</td>
<td>30</td>
<td>KolhkiloyeBoyerAhmad</td>
<td>0.0199</td>
</tr>
<tr>
<td>15</td>
<td>Gilan</td>
<td>0.141</td>
<td>31</td>
<td>Ilam</td>
<td>0.0198</td>
</tr>
<tr>
<td>16</td>
<td>Lorestan</td>
<td>0.1405</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the chart below, the country's provinces are ranked in terms of power rents, which can be distinguished according to the cluster model, putting different provinces of the country in five different categories. The first cluster that has the lowest power rents rated 0-0.1
and for other clusters, one unit is added, finally, the fifth cluster has a score of 0-0.5.

Figure 1: The Political Influence Coefficient (Power Rents) among the Provinces in the Tenth State

According to the following cluster model, in the first cluster (very influential): there is 1 province, Second cluster (high influence): there are 4 provinces, third cluster (medium influence): there are 8 provinces, fourth cluster (low influence): there are 10 provinces and fifth cluster (zero influence): there are 8 provinces.
7. Conclusion

The penetration coefficient is a term introduced in the present study, which has a spiritual and material meaningful semantics regarding power and politics having impact on the development of provinces in the unbalanced distribution of areas with tangible effects. In other words, each province with the most influential people in the country's decision-making centers is known as provinces with high influence rates. The present study, using relevant indicators (The most influential people in the three governmental branches and the IRIB Broadcasting), seeks for each province's share of power for the tenth state. After the formation of a regression model of 14 variables and using the multi-criteria decision making Topsis model, ranking of power rents in Iran was carried out. It was determined that to what extent the provinces of the country play a role in the management of the country. The largest share of ministers was in Tehran, with 5 ministers and East Azarbaijan and Isfahan, respectively, with 3 ministers and the Vice President share; Tehran with 5 vice presidents, Kerman and Gilan, each with 2 vice presidents. The selection of the above-mentioned places which has a high weight in the provincial rankings, is within the powers of the head of the executive branch or
the president. In terms of taking seats in the Islamic Consultative Assembly (parliament), Tehran with 34 seats and Isfahan and East Azarbaijan each with 19 seats are the next category which, in terms of political influence, are among the clusters above the average. During the four years of administration of the tenth state, Kerman has two seats of the Chairman of the Expediency Council and first Vice President. Gilan has two seats of the Judiciary and the Legislature also stands at the top of the political influence table. The speaker of the Assembly of Experts was also a chairmanship that changed twice, once for Isfahan and once for Tehran. The Attorney General of the country has also been a chairmanship interchanged among the KhorasanRazavi and Isfahan. The head of the IRIB Broadcasting, as another indicator of the political influence coefficient, was exchanged between Tehran and Gilan. The Governor of the Central Bank chairmanship has been for the province of Hamedan for the last 4 years. The head of the Red Crescent chairmanship has been for the province of Semnan. The Supreme Court presided over the Zanjan province and the central province.

In general, it can be stated that most of the key posts were given to one-third of the provinces of the country, and the highest and lowest rates belonged to Tehran and Ilam, respectively. The other results are that the capital of Iran, Tehran, was the most influential province and 4 provinces (Isfahan, East Azarbaijan, Khuzestan, Semnan) were highly influential. 8 provinces were identified as having medium rents and influence (Fars, Mazandaran, Kurdistan, Kerman, Hamedan, KhorasanRazavi, Chaharmahal and Bakhtiar, Ardebil) and 10 provinces (Alborz, Gilan, Lorestan, Sistan and Baluchestan, Kermanshah, Central, Qom, Golestan, West Azarbaijan, Yazd) recognized as provinces with low rents and low influence, and nine provinces (Hormozgan, Zanjan, South Khorasan, North Khorasan, Qazvin, Bushehr, Kohkiluyeh and Boyer Ahmad, Ilam) also recognized as having the influence rating of zero.

From the social justice system point of view, the abovementioned interpretations are not totally right, and the contribution of the provinces at the end of the table regarding prioritization was zero, meaning that senior national management is limited to a few provinces above the table. There may be some drawbacks in addressing this conflict regarding management distribution based on each model and
The Political Influence Coefficient of the Provinces in the …

indicator. Therefore, governors and the member of the parliament should include the core justice laws in their mid-term and long-term plans in this regard and balance the management distribution at the macro level in the top priority of moving towards social justice on the agenda in line with national development. This can play a significant role as one of the pillars of the country's development.

The introduction of the present index not only provides a path for clarifying the distribution of resources and budget allocations of countries but also questions the approach to the purely economic attitudes and the need for the regional potential for development. According to the ranking for this indicator in this article for the provinces of the country, one can find out the correlation between this indicator and the development of the regions. In this regard, a path has been opened which has the ability to research and investigate future research in the form of figures for it.

References


