

Дегресивно-пропорційний розподіл місць в Європейському Парламенті

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Європейський Парламент є однією з найважливіших установ Європейського Союзу. Його компетенція зростає в процесі розвитку та успішного розширення Європейського Союзу. Проте, основним завданням Європейського Парламенту є представництво прав громадян союзу. Кількість громадян, представлених членами певної країни, залежить в свою чергу від кількості населення даної держави.

Проте, велика різниця в кількості населення країн-членів не дозволяє використати пропорційні методи, такі як метод Хемільтона та методу розподілу Джеферсона, Адамса чи Вебстера. Було впроваджено нове правило – «принцип дегресивної пропорційності», згідно якого члени Парламенту з країн, які мають більшу кількість населення, представляють більше громадян, ніж представники країн із меншою кількістю населення. Вимога дотримуватись нового правила для розподілу місць в Європейському парламенті міститься у Лісабонській Угоді.

Проте, в угоді нічого не сказано про спосіб видачі мандатів. Були запропоновані лише заходи для перевірки відповідності принципу дегресивної пропорційності. Проте, вони не замінюють алгоритму універсального розподілу. Наприклад, недоліки, пов'язані з його браком - це неможливість оцінити склад Парламенту на наступні терміни через постійне розширення Союзу та демографічні зміни.

Окрім цього, вони спричиняють брак прозорості у визначеному складі Європейського Парламенту, остаточною формою якої великою мірою залежить від навиків політиків проводити переговори. Таким чином, якщо сформулювати чітку формулу чи алгоритм, на основі яких будуть призначатись кількість місць для країн-членів, то це точно покращить процес їх розподілення.

Переклад виконано в Агенції перекладів PIO
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Degressively proportional allocation of seats in the European Parliament

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The European Union has not adopted a precisely determined algorithm for establishing the composition of the European Parliament. It directs only to comply with the generally understood degressively proportional distribution. The lack of a transparent and verifiable formula causes a lot of inconvenience. In this work a principle of degressive proportionality has been presented, together with its characteristics and limitations.

Keywords – degressive proportionality, European Parliament, European Union, fair division, indivisible goods.

I. Introduction

The Problem of distribution of goods, which cannot be divided into smaller parts is one of the oldest problems of every type of society. We have to deal with such situation during apportionment of seats – for example, parliamentary. Within a few hundred years different methods have been developed, on the basis of which the composition of units representing a given collectivity was established. These include the divisor method of Jefferson, Adams, or Webster and the known method of Hamilton. They were created, however, on the basis of the proportional division, which must not be used in the case of the European Parliament. This is due to the fact that Member States differ with regard to population, on the basis of which seats are allocated. For this reason, the place in the European Parliament are granted according to the principle of degressive proportionality.

II. Degressive proportionality

Degressive proportionality was written in art. 1 point 15 of the Lisbon Treaty:

“The European Parliament shall be composed of representatives of the Union's citizens. They shall not exceed seven hundred and fifty in number, plus the President. Representation of citizens shall be degressively proportional, with a minimum threshold of six members per Member State. No Member State shall be allocated more than ninety-six seats.” [1]

In this entry, the total number of seats to be divided, and the maximum and minimum number of seats for each State has been determined. It does not contain, however, the characteristics of a degressive proportionality. This failure was supplemented in the Resolution of the European Parliament and the report of the Committee on Constitutional Affairs. Rules described in these documents illustrate how to apply the principle provided in the Treaty of Lisbon. An analysis of their content enables

identifying two conditions, which can be considered as a definition of degressive proportionality. In accordance with these conditions, the members of Parliament from countries with a higher population represent greater number of citizens, and have at least the same number of seats as the countries with a smaller population.

If n is the number of States, l_i number of population of the State and m_i the number of seats appointed to the State, all conditions can be written in the following way:

$$W1. \sum_{i=1}^n m_i \leq 751, 6 \leq m_i \leq 96 \quad (1)$$

$$W2. l_1 < l_2 < \dots < l_n \Rightarrow m_1 \leq m_2 \leq \dots \leq m_n \quad (2)$$

$$W3. l_1 < l_2 < \dots < l_n \Rightarrow \frac{l_1}{m_1} < \frac{l_2}{m_2} < \dots < \frac{l_n}{m_n} \quad (3)$$

The first of them, written in the Treaty of Lisbon, specifies the total number of parliamentarians on the level of 751, with a minimum of 6 to a maximum of 96 seats for each State. Other conditions result from the rules contained in additional parliamentary documents. The second condition says that States with larger population cannot receive fewer seats than States with less numerous population. The third indicates that the members Parliament of the country with less numerous population represent smaller number of citizens.

III. Examples of functions

The creators of the Report of the Committee on Constitutional Affairs noted that *"The ideal alternative would be to agree on an undisputed mathematical formula of "degressive proportionality" that would ensure a solution not only for the present revision but for future enlargements or modifications due to demographic changes"* [2]. No formula has yet to be adopted, but devising the conditions defining the designation of the principle of degressive proportionality leads to the possibility of creating multiple algorithms or functions, on the basis of which content of the European Parliament may be appointed. J. Haman noted that *"If in a rectangular coordinate system horizontal axis describes the number of the population, and the vertical axis is the number of mandates, (...) the line representing the relation between the number of inhabitants, and the number of mandates should together with the increase in the number of inhabitants decrease its inclination in relation to the horizontal axis. The choice of degressive allocation method can therefore be reduced to the selection (strictly concave and increasing) function of the relationship between the number of inhabitants, and the number of seats (concavity is not a prerequisite, but a sufficient condition). Of course, after rounding the results to integers concavity may 'break'"* [3].

A different approach may be placing on the abscissa the number of population and as the ordinate the ratio of the number of mandates to the population. If you want to ensure that the first condition is fulfilled (Eq. (1)), it must be assumed that: $m_1 = 6$ and $m_{27} = 96$ and then choose the function which, depending on the number of population assigns such a number of seats, that the sum of all distributed seats should be as close as possible to 751.

In this work two functions will be examined. The first of them is a straight line joining the points (4005006; 6/4005006) and (82437995; 96/82437995), where the first coordinates are respectively the population of the smallest (Malta) and largest (Germany) country. The sum of the products of the population of a given Member State with the value of the function (rounded to integer) is found to be much greater than that the imposed 751 mandates. Thus, this function will return degressively proportional distribution, in which the smallest country gets exactly 6, the largest 96 seats and the total number of seats is less than 751. In addition, after rounding results one can observe "breaking" of degressiveness. Another tested function has the form of: $f(x) = a/x^b$, where a and b are regulatory parameters. Of course, if you want to ensure that Malta gets 6 and Germany 96 seats, there can be only one such function set. It returns, however, as previously considered linear function, the total number of seats far exceeding the value of 751. To reduce this amount to the figure recorded in the Treaty of Lisbon, it is necessary to amend both the minimum and maximum number of seats. An example of such a distribution is:

4,5,6,8,10,11,14,15,17,18,18,21,22,23,24,25,25,26,32,37,49,53,62,63,64,74 ($a = 0,005554$, $b = 0,478435$).

As you may have noted, ensuring exactly 751 mandates, causes a significant deviation from the recommended 6 and 96 seats for the smallest and largest State.

The construction of the algorithm for determining the composition of the European Parliament is therefore not possible on the basis of the mentioned functions – assuming that exactly 6 and 96 seats were granted for countries with the smallest and the largest number of citizens.

Conclusion

The principle of degressive proportionality introduced in the Treaty of Lisbon, on the one hand, regulates and clearly specifies the method of allocation of seats in the European Parliament, on the other hand, introduces new doubts and queries. The adopted minimum, maximum and the total number of seats may not be achieved using so-called natural functions as a linear function or power function. It seems that the choice of these restrictions was not substantiated by concrete facts. Clarifying the application of the new policy would undoubtedly reduce the complications emerging on many stages of the analysis.

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