

**DISTRIBUTION OF SEATS
IN THE EUROPEAN PARLIAMENT
IN ACCORDANCE WITH THE PRINCIPLE
OF DIGRESSIVE PROPORTIONALITY**

Katarzyna Cegielka

Abstract. Division of mandates to the European Parliament has been regulated in the Lisbon Treaty, according to which seats are allocated according to the principle of digressive proportionality. The terms of the new rules are associated with large differences in the population of the European Union countries, which have taken place since the inception of the Union. Despite the fact that the new rule has been in force since 2009, in the paper the author has shown that the divisions existing in previous terms of office of the European Parliament also complied with the new assumptions.

Keywords: European Union, European Parliament, digressive proportionality, fair division, indivisible goods.

JEL Classification: D39.

1. Introduction

The European Parliament is nowadays one of the most important European Union institutions. Its functions include, inter alia, the adoption of European laws and supervision of institutions and the Union Budget. However, its main task is the representation of nationals of the Member States. An important problem is therefore the choice of appropriate procedure for allocating the number of seats to individual countries. Over the decades of functioning of the European Parliament no explicit formula which could be the basis for their division has been determined. It was twice attempted to formulate rules on the allocation of seats, however, they were never strictly applied and every time it was necessary to negotiate. More detailed rules for selecting the composition of the European Parliament were included in the

Katarzyna Cegielka

Department of Mathematics, Wrocław University of Economics, Komandorska Street 118/120,
53-345 Wrocław, Poland.

E-mail: katarzyna.cegielka@ue.wroc.pl

Lisbon Treaty which came into force on 1 December 2009. It introduced the concept of digressive proportionality, which for the first time approximates the structure of the division of seats and features that should characterize it.

The article presents the principle of digressive proportionality and the reasons for its introduction. Additionally, it verifies the compliance of division of seats in consecutive parliamentary terms with the binding rule.

2. Degressive proportionality

According to Article 1 Point 15 of Lisbon Treaty, Article 9a is added to the Treaty on European Union. Its Paragraph 2 reads:

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. (Treaty of Lisbon)

The Treaty explicitly points out degressively proportional form of representation of citizens. Nevertheless, it does not define the rule – Article 9a only introduces a new concept. Further description of digressive proportionality was included in the Report of the Committee on Constitutional Affairs and the European Parliament Resolution, the draft of which is attached to the Report. According to Article 1 of Annex 1 of the European Parliament Resolution on the composition of the European Parliament (Lamassoure, Severin, 2007):

The principle of degressive proportionality provided for in Article [9a] of the Treaty on European Union shall be applied as follows:

– the minimum and maximum numbers set by the Treaty must be fully utilised to ensure that the allocation of seats in the European Parliament reflects as closely as possible the range of populations of the Member States;

– the larger the population of a country, the greater its entitlement to a large number of seats;

– the larger the population of a country, the more inhabitants are represented by each of its Members of the European Parliament.

The Report of the Committee on Constitutional Affairs contains additional rules characterizing digressive proportionality (Lamassoure, Severin, 2007):

- **The principle of efficiency** – limitation of the maximum number of deputies to 750 results from the impossibility of the functioning of the European Parliament with too many members.

- **The principle of national representation and motivation of voters** – granting each Member State a minimum number of seats allows appropriate representation of national political trends and mobilizes a country's citizens to vote and participate in the democratic processes of the European Union.

- **The principle of European solidarity** – granting more populated states fewer seats than they would receive using a proportional allocation allows better representation for less populated states.

- **The principle of the relative proportionality** – the smaller is the ratio of population to the number of seats, the smaller is the state and respectively greater, the greater the state is.

- **The principle of fair distribution** – no country will be given more seats than a state with a larger population and fewer than a less populated state.

- **The principle of the justified flexibility or of a flexible direct proportionality** – the number of granted seats can be modified if it levels out to the largest possible extent the differences between countries and other rules are followed.

The principles mentioned in the Report and the European Parliament Resolution allow to specify degressively proportional distribution conditions. For n being the number of Member States, l_i – population of the country i and m_i – the number of mandates of the country i one can write them as follows:

$$W1. \sum_{i=1}^n m_i = 750, 6 \leq m_i \leq 96,$$

$$W2. l_1 < l_2 < \dots < l_n \Rightarrow m_1 \leq m_2 \leq \dots \leq m_n,$$

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

It is possible to construct a number of proposals for the composition of the European Parliament, as there still has not been specified a universal formula or algorithm. Defined conditions cause, however, that one can check compliance of the division with the principle of digressive proportionality.

3. Proportional division

The third condition of the principle of digressive proportionality says that MEPs from countries with a higher population represent more citizens than the Members from countries with lower population. Distribution of seats in the European Parliament is therefore not based on proportional allocation methods, whose purpose is to assign to each mandate equal number of voters. This is due to a large diversity of the Member States because of the number of their population. For example using the Jefferson method¹ (Young, 2003), for 750 seats to be divided, two smallest countries – Malta and Luxembourg – would not receive any mandate and Germany would have about 30 more than the second largest, France. On the other hand, wanting to ensure the smallest state a minimum number of 6 seats the size of the European Parliament would exceed 7000 MEP's. Therefore the use of proportional allocation methods is impossible – countries with the lowest population density must be guaranteed the appropriate role of decision-making and the efficient functioning of the European Parliament requires limiting the number of Members.

4. Compliance of divisions with the degressive proportionality rule

The first term of the European Parliament, when MPs were for the first time elected by universal direct suffrage, began in 1979. The European Union was then composed of nine member states, including Luxembourg and Germany, whose population was respectively 360,000 and 61.5 million citizens. Differences in the population which prevented the use of proportional methods of distribution of seats therefore occurred in the first parliamentary term. They also took place in the next one and seats were allocated in a way different from proportional methods – larger countries always represented a greater number of voters. It was not until the Lisbon Treaty enrolled the principle of digressive proportionality whose conditions allow the verification of the composition of the European Parliament in consecutive terms and whether, despite the fact that it has been valid from 2009, the prior divisions complied with it.

¹ Jefferson's method is the so-called divisor method which consists of dividing the population of each Member State by the same positive number. The result obtained is rounded to the integer. If the total number of seats is lower/greater than presumed, the divisor should be decreased/increased.

Tables 1-4 show the structure of the European Parliament in its first four terms in office. In the first two columns countries are arranged in ascending order in terms of population. In the third and fourth column there have been examined two conditions of digressive proportionality:

$$W2: l_1 < l_2 < \dots < l_n \Rightarrow m_1 \leq m_2 \leq \dots \leq m_n,$$

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

The first condition, determining the total number of MPs to 750, was omitted because it takes into account the composition of the present Union, that is with 27 member states. In the earlier terms of the Parliament the composition of European Union included a smaller number of countries, and thus the European Parliament and the number of members sitting in it were lower. In addition, at each new accession, the number of MPs was changed.

The composition of the first four parliamentary terms met the conditions of digressive proportionality. Countries with a higher population density did not have fewer seats and represented more citizens than countries with a smaller population, so that with the increase in population the number of mandates did not decrease (W2) and the ratio of population and number of mandates increased (W3).

Table 1. Compliance of division of seats in the EP with the principle of digressive proportionality 1979-1984

Composition of European Parliament 1979-1984							
Start of term – 1979				End of term – 1984			
Country	Population	W2	W3	Country	Population	W2	W3
Luxembourg	360 900	6	60 150	Luxembourg	365 500	6	60 917
Ireland	3 228 000	15	215 200	Ireland	3 540 643	15	236 043
Denmark	5 065 313	16	316 582	Denmark	5 112 130	16	319 508
Belgium	9 811 000	24	408 792	Belgium	9 862 000	24	410 917
Netherlands	13 770 000	25	550 800	Greece	9 951 370	24	414 640
France	54 159 000	81	668 630	Netherlands	14 572 000	25	582 880
Italy	55 839 000	81	689 370	France	56 444 748	81	696 849
Great Britain	56 216 100	81	694 026	Italy	56 565 117	81	698 335
Germany	61 644 624	81	761 045	Great Britain	56 683 800	81	699 800
				Germany	61 306 669	81	756 872

Source: own work.

Table 2. Compliance of division of seats in the EP with the principle of digressive proportionality 1984-1989

Composition of European Parliament 1984-1989							
Start of term – 1984				End of term – 1989			
Country	Population	W2	W3	Country	Population	W2	W3
Luxembourg	364 597	6	60 766	Luxembourg	375 800	6	62 633
Ireland	3 443 405	15	229 560	Ireland	3 525 719	15	235 048
Denmark	5 123 989	16	320 249	Denmark	5 129 778	16	320 611
Belgium	9 729 350	24	405 390	Portugal	9 919 000	24	413 292
Greece	9 806 100	24	408 588	Belgium	9 986 975	24	416 124
Netherlands	14 091 014	25	563 641	Greece	10 223 392	24	425 975
France	55 399 000	81	683 938	Netherlands	14 892 574	25	595 703
Great Britain	56 357 500	81	695 772	Spain	39 541 782	60	659 030
Italy	56 524 064	81	697 828	Italy	56 649 201	81	699 373
Germany	61 657 945	81	761 209	Great Britain	57 438 700	81	709 120
				France	57 996 401	81	716 005
				Germany	61 715 103	81	761 915

Source: own work.

Table 3. Compliance of division of seats in the EP with the principle of digressive proportionality 1989-1994

Composition of European Parliament 1989-1994							
Start of term – 1989				End of term – 1994			
Country	Population	W2	W3	Country	Population	W2	W3
Luxembourg	367 100	6	61 183	Luxembourg	400 200	6	66 700
Ireland	3 540 643	15	236 043	Ireland	3 626 087	15	241 739
Denmark	5 116 273	16	319 767	Denmark	5 196 642	16	324 790
Belgium	9 862 000	24	410 917	Portugal	10 065 543	24	419 398
Portugal	9 907 000	24	412 792	Belgium	10 100 631	24	420 860
Greece	9 951 370	24	414 640	Greece	10 479 420	24	436 643
Netherlands	14 572 000	25	582 880	Netherlands	15 493 889	25	619 756
Spain	38 473 418	60	641 224	Spain	40 229 598	60	670 493
France	56 444 748	81	696 849	Italy	56 842 392	81	701 758
Italy	56 597 823	81	698 739	Great Britain	58 164 400	81	718 079
Great Britain	56 683 800	81	699 800	France	59 280 577	81	731 859
Germany	61 020 474	81	753 339	Germany	61 338 093	81	1 004 174

Source: own work.

Table 4. Compliance of division of seats in the EP with the principle of digressive proportionality 1994-1999

Composition of European Parliament 1994-1999							
Start of term – 1994				End of term – 1999			
Country	Population	W2	W3	Country	Population	W2	W3
Luxembourg	384 634	6	64 106	Luxembourg	427 350	6	71 225
Ireland	3 525 719	15	235 048	Ireland	3 732 201	15	248 813
Denmark	5 146 469	16	321 654	Finland	5 159 646	16	322 478
Portugal	9 919 000	25	396 760	Denmark	5 313 577	16	332 099
Belgium	9 986 975	25	399 479	Austria	7 982 461	21	380 117
Greece	10 223 392	25	408 936	Sweden	8 854 322	22	402 469
Netherlands	14 892 574	31	480 406	Portugal	10 148 883	25	405 955
Spain	39 433 942	64	616 155	Belgium	10 213 752	25	408 550
Italy	56 744 119	87	652 231	Greece	10 861 402	25	434 456
Great Britain	57 438 700	87	660 215	Netherlands	15 760 225	31	508 394
France	57 996 401	87	666 625	Spain	39 802 827	64	621 919
Germany	79 753 227	99	805 588	Italy	56 909 109	87	654 127
				Great Britain	58 579 685	87	673 330
				France	60 158 533	87	691 477
				Germany	82 037 011	99	828 657

Source: own work.

During the fifth parliamentary term the biggest enlargement of the Union took place. In 2004, when Poland joined the EU, the number of Member States increased from 15 to 25, and the composition of the Parliament for the first time did not fulfil the conditions of digressive proportionality. Table 5 shows the distribution of seats in Parliament between 1999-2004.

Division being in force in 2004 did not meet any of the conditions of digressive proportionality. Slovakia received a smaller number of seats than less populated Finland. Members from five other countries highlighted in the table represent a smaller number of citizens than members from countries with fewer voters.

The composition of the European Parliament between 2004-2009 also was not consistent with the principle of digressive proportionality. But unlike the previous term, only the third condition was not satisfied – so at the beginning and end of the term, Luxembourg, Latvia, Hungary and Italy represented too few citizens. The division of the sixth parliamentary term is presented in Table 6.

Table 5. Compliance of division of seats in the EP with the principle of digressive proportionality 1999-2004

Composition of European Parliament 1999-2004							
Start of term – 1999				End of term – 2004			
Country	Population	W2	W3	Country	Population	W2	W3
Luxembourg	411 600	6	68 600	Malta	399 867	5	79 973
Ireland	3 626 087	15	241 739	Luxembourg	454 960	6	75 827
Finland	5 132 320	16	320 770	Cyprus	730 367	6	121 728
Denmark	5 251 027	16	328 189	Estonia	1 351 069	6	225 178
Austria	7 959 016	21	379 001	Slovenia	1 996 433	7	285 205
Sweden	8 837 496	22	401 704	Latvia	2 319 203	9	257 689
Portugal	10 065 543	25	402 622	Lithuania	3 445 857	13	265 066
Belgium	10 143 047	25	405 722	Ireland	4 027 732	15	268 515
Greece	10 479 420	25	419 177	Finland	5 219 732	16	326 233
Netherlands	15 493 889	31	499 803	Slovakia	5 380 053	14	384 290
Spain	39 669 394	64	619 834	Denmark	5 397 640	16	337 353
Italy	56 844 197	87	653 382	Austria	8 140 122	21	387 625
Great Britain	58 164 400	87	668 556	Sweden	8 975 670	22	407 985
France	59 280 577	87	681 386	Hungary	10 116 742	24	421 531
Germany	81 817 499	99	826 439	Czech Republic	10 211 455	24	425 477
				Belgium	10 396 421	25	415 857
				Portugal	10 474 685	25	418 987
				Greece	11 040 650	25	441 626
				Netherlands	16 258 032	31	524 453
				Poland	38 190 608	54	707 233
				Spain	42 345 342	64	661 646
				Italy	57 888 245	87	665 382
				Great Britain	59 699 828	87	686 205
				France	62 251 817	87	715 538
				Germany	82 531 671	99	833 653

Source: own work.

Table 6. Compliance of division of seats in the EP with the principle of digressive proportionality 2004-2009

Composition of European Parliament 2004-2009							
Start of term – 2004				End of term – 2009			
Country	Population	W2	W3	Country	Population	W2	W3
Malta	391 415	5	78 283	Malta	413 609	5	82 722
Luxembourg	439 000	6	73 167	Luxembourg	493 500	6	82 250
Cyprus	697 549	6	116 258	Cyprus	796 875	6	132 813
Estonia	1 366 959	6	227 827	Estonia	1 340 415	6	223 403
Slovenia	1 990 094	7	284 299	Slovenia	2 032 362	7	290 337
Latvia	2 364 254	9	262 695	Latvia	2 261 294	9	251 255
Lithuania	3 486 998	13	268 231	Lithuania	3 349 872	13	257 682
Ireland	3 832 973	13	294 844	Ireland	4 450 014	13	342 309
Finland	5 181 115	14	370 080	Finland	5 326 314	14	380 451
Denmark	5 349 212	14	382 087	Slovakia	5 412 254	14	386 590
Slovakia	5 378 783	14	384 199	Denmark	5 511 451	14	393 675
Austria	8 020 946	18	445 608	Bulgaria	7 606 551	18	422 586
Sweden	8 882 792	19	467 515	Austria	8 355 260	18	464 181
Hungary	10 200 298	24	425 012	Sweden	9 256 347	19	487 176
Portugal	10 256 658	24	427 361	Hungary	10 030 975	24	417 957
Belgium	10 263 414	24	427 642	Czech Republic	10 467 542	24	436 148
Czech Republic	10 266 546	24	427 773	Portugal	10 627 250	24	442 802
Greece	10 931 206	24	455 467	Belgium	10 750 000	24	447 917
Netherlands	15 987 075	27	592 114	Greece	11 260 402	24	469 183
Poland	38 253 955	54	708 407	Netherlands	16 485 787	27	610 585
Spain	40 476 723	54	749 569	Romania	21 498 616	35	614 246
Italy	56 960 692	78	730 265	Poland	38 135 876	54	706 220
Great Britain	58 999 781	78	756 407	Spain	45 828 172	54	848 670
France	60 979 315	78	781 786	Italy	60 045 068	78	769 809
Germany	82 259 540	99	830 904	Great Britain	61 634 599	78	790 187
				France	64 350 759	78	825 010
				Germany	82 002 356	99	828 307

Source: own work.

The current term of office of the European Parliament began in 2009. In 2007, the Committee on Constitutional Affairs submitted a Report containing a project of Resolution approximating the principle of digressive proportionality. It also included a proposal for allocating seats for the seventh term of office of Parliament. It was consistent with the principle of digressive proportionality,

but too late for ratification of the Treaty, which entered into force in December 2009, thus after the elections to the European Parliament, it meant that the proposal was not accepted. The current composition of Parliament was thus based on a division contained in the Treaty of Nice. The summary of the two divisions is presented in Table 7.

Table 7. Compliance of division of seats in the EP with the principle of digressive proportionality 2009-2014

Composition of European Parliament 2009-2014							
Valid composition – 2009				Proposed (LT) composition – 2009			
Country	Population	W2	W3	Country	Population	W2	W3
Malta	405 006	5	81 001	Malta	405 006	6	67 501
Luxembourg	469 086	6	78 181	Luxembourg	469 086	6	78 181
Cyprus	766 414	6	127 736	Cyprus	766 414	6	127 736
Estonia	1 344 684	6	224 114	Estonia	1 344 684	6	224 114
Slovenia	2 003 358	7	286 194	Slovenia	2 003 358	8	250 420
Latvia	2 294 590	8	286 824	Latvia	2 294 590	9	254 954
Lithuania	3 403 284	12	283 607	Lithuania	3 403 284	12	283 607
Ireland	4 209 019	12	350 752	Ireland	4 209 019	12	350 752
Finland	5 255 580	13	404 275	Finland	5 255 580	13	404 275
Slovakia	5 389 180	13	414 552	Slovakia	5 389 180	13	414 552
Denmark	5 427 459	13	417 497	Denmark	5 427 459	13	417 497
Bulgaria	7 718 750	17	454 044	Bulgaria	7 718 750	18	428 819
Austria	8 265 925	17	486 231	Austria	8 265 925	19	435 049
Sweden	9 047 752	18	502 653	Sweden	9 047 752	20	452 388
Hungary	10 076 581	22	458 026	Hungary	10 076 581	22	458 026
Czech Republic	10 251 079	22	465 958	Czech Republic	10 251 079	22	465 958
Belgium	10 511 382	22	477 790	Belgium	10 511 382	22	477 790
Portugal	10 569 592	22	480 436	Portugal	10 569 592	22	480 436
Greece	11 125 179	22	505 690	Greece	11 125 179	22	505 690
Netherlands	16 334 210	25	653 368	Netherlands	16 334 210	26	628 239
Romania	21 610 213	33	654 855	Romania	21 610 213	33	654 855
Poland	38 157 055	50	763 141	Poland	38 157 055	51	748 178
Spain	43 758 250	50	875 165	Spain	43 758 250	54	810 338
Italy	58 751 711	72	815 996	Italy	58 751 711	72	815 996
Great Britain	60 393 100	72	838 793	Great Britain	60 393 100	73	827 303
France	62 998 773	72	874 983	France	62 998 773	74	851 335
Germany	82 437 995	99	832 707	Germany	82 437 995	96	858 729

Source: own work.

Table 8. Compliance of division of seats in the EP with the principle of digressive proportionality 2009-2014 (2009)

Composition of European Parliament 2009-2014							
Valid composition – 2009				Proposed (LT) composition – 2009			
Country	Population	W2	W3	Country	Population	W2	W3
Malta	413 609	5	82 722	Malta	413 609	6	68 935
Luxembourg	493 500	6	82 250	Luxembourg	493 500	6	82 250
Cyprus	796 875	6	132 813	Cyprus	796 875	6	132 813
Estonia	1 340 415	6	223 403	Estonia	1 340 415	6	223 403
Slovenia	2 032 362	7	290 337	Slovenia	2 032 362	8	254 045
Latvia	2 261 294	8	282 662	Latvia	2 261 294	9	251 255
Lithuania	3 349 872	12	279 156	Lithuania	3 349 872	12	279 156
Ireland	4 450 014	12	370 835	Ireland	4 450 014	12	370 835
Finland	5 326 314	13	409 716	Finland	5 326 314	13	409 716
Slovakia	5 412 254	13	416 327	Slovakia	5 412 254	13	416 327
Denmark	5 511 451	13	423 958	Denmark	5 511 451	13	423 958
Bulgaria	7 606 551	17	447 444	Bulgaria	7 606 551	18	422 586
Austria	8 355 260	17	491 486	Austria	8 355 260	19	439 751
Sweden	9 256 347	18	514 242	Sweden	9 256 347	20	462 817
Hungary	10 030 975	22	455 953	Hungary	10 030 975	22	455 953
Czech Republic	10 467 542	22	475 797	Czech Republic	10 467 542	22	475 797
Portugal	10 627 250	22	483 057	Portugal	10 627 250	22	483 057
Belgium	10 750 000	22	488 636	Belgium	10 750 000	22	488 636
Greece	11 260 402	22	511 836	Greece	11 260 402	22	511 836
Netherlands	16 485 787	25	659 431	Netherlands	16 485 787	26	634 069
Romania	21 498 616	33	651 473	Romania	21 498 616	33	651 473
Poland	38 135 876	50	762 718	Poland	38 135 876	51	747 762
Spain	45 828 172	50	916 563	Spain	45 828 172	54	848 670
Italy	60 045 068	72	833 959	Italy	60 045 068	72	833 959
Great Britain	61 634 599	72	856 036	Great Britain	61 634 599	73	844 310
France	64 350 759	72	893 761	France	64 350 759	74	869 605
Germany	82 002 356	99	828 307	Germany	82 002 356	96	854 191

Source: own work.

The proposal contained in the resolution meets the conditions of digressive proportionality. It therefore appears that if the Lisbon Treaty came into force before European Parliament elections, the current distribution of seats would be the first, since 2004, division compatible with the principle of

digressive proportionality. The proposal, however, was prepared in 2007. Its creators rely therefore on demographic data from 2006 – the only most up-to-date at the time. After comparing the proposed distribution with the data from 2009 – hence the year in which began the seventh term of Parliament – it turns out that it does not meet the conditions of digressive proportionality.

Table 8 shows the existing and the proposed composition of Parliament for the demographic data from 2009. The table shows the states for which the third condition of digressive proportionality was not accomplished. It took only three years for the division compatible with the principle of digressive proportionality to no longer meet its conditions.

5. Conclusions

The differentiation of population of EU Member States means that the proportional methods of seat allocation for the European Parliament cannot be applied. Officially, since 2009, the allocation of seats should be in accordance with the principle of digressive proportionality. The composition of Parliament, however, met its conditions – despite the absence of formal guidelines – already in the first of its cadences. The permanent enlargement of the EU, however, resulted in the fact that the separation of a certain number of seats for many countries in accordance with the terms of digressive proportionality is not an easy task. Ongoing demographic changes inhibit it even further. The division compliant with the principle in a given year may not be one in subsequent years. Undoubtedly, the problem would be solved by the determination of a particular mathematical formula, so the process of selecting the composition of the European Parliament would be more transparent.

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