Marcin Kleinowski

Nicolaus Copernicus University in Toruń

ORCID: 0000-0003-4613-5886

The impact of Brexit on the member states' ability to build blocking coalitions in the Council

Abstract: Using a proprietary computer program, simulations of voting in the Council after Great Britain's withdrawal from the EU were carried out. In the case of some of them, a methodological innovation consisting in departing from the assumption that the emergence of each possible coalition is equally probable was used. The analysis conducted indicates that after Brexit the ability of the Council members to form small minimally blocking coalitions will change significantly. At the same time, the assessment of the ability of states to block decisions in the Council and made on the basis of the Preventive Power Index, differs fundamentally from the results of the analysis focusing on building small minimally blocking coalitions.

This research is funded by the National Science Centre, Poland, under project no. UMO-2016/23/D/HS5/00408 (SONATA 12 grant) entitled "The Impact of Brexit and Unconditional Introduction of the 'Double Majority' Voting System on Decision-Making in the Council of the European Union."

Key words: Brexit, blocking coalitions, Council of the European Union, voting power

Introduction

On November 1, 2014, the Treaty of Lisbon introduced a new weighted voting system in the Council (the so-called 'double majority system'). One of the main arguments for the introduction of the change was the relative ease of its adjustment in the case of accession of new member states. From the outset, however, it raised doubts as to whether Turkey's accession to the EU, as a state with a big population, could take place without substantial modification of this system (Baldwin, Widgrén, 2005; Bobay, 2004). The possibility of withdrawal from the EU of one of the largest member states was not taken into account.

¹ Under Art. 3(2) of the Protocol on Transitional Provisions (2012), between November 1, 2014 and March 31, 2017 each member state could request that the Nice voting system be applied for the adoption of an act by qualified majority.

The article presents the results of research on Brexit's influence on the ability of member states to create small minimally blocking coalitions. They indicate that as a result of the United Kingdom's withdrawal from the EU, it will be much more difficult to build a blocking coalition without Germany or France. Also, the coordination of positions presented in the Council by the Franco-German tandem and the Visegrad Group has a significant impact on building blocking coalitions.

The research also shows that the use of the Coleman's (1971) Preventive Power Index (PPI) to measure the ability of Council members to block decisions on the forum of this institution, together with the adoption of the assumption that the formation of any coalition is equally probable, may lead to false conclusions, because in practice it is very difficult to build a blocking coalition consisting of a relatively large number of members. The results of the analysis based on simple voting games using PPI indicate that, as a result of Brexit, the ability to block decisions in the Council should increase, primarily in the case of Spain and Poland. Focusing on the ability to create small, minimally blocking coalitions, however, we come to different conclusions. The theoretical ability to build blocking coalitions by Spain and Poland will increase after the UK's withdrawal from the EU, but to a much lesser extent than in the case of Germany, France and Italy, without whose support it will be very difficult to block decisions in the Council.

Why votes matter

The results of research conducted by Hayes-Renshaw et al. (2006), Mattila (2004, 2008), Heisenberg (2005), Kleinowski (2012) and Häge (2013) demonstrate that the vast majority of decisions in the Council are taken through informal negotiations, and referring to a formal vote is rare. This does not mean that the weighted voting system in the Council is considered irrelevant in the decision-making process. To adopt any decision, it is necessary to obtain a majority of votes defined in EU law, so the 'tacit consent' of the required majority of Council members is indispensable. Baldwin and Widgren (2003) indicate the existence of so-called 'shadow voting.' During work on a legal act in the Council, the number of votes held by the member states grouped in individual coalitions is counted in the wings. Concessions made to member states in the Council, as well as their size and character, depend to a great extent on whether a majority

that is able to pass a proposal or a blocking coalition has been formed (Thomson, 2011).

In research based on rational choice theory, it is not uncommon to find a position according to which states with greater voting power should, generally, exert more influence over the decisions made in the Council in the longer perspective (Felsenthal, Machover, 1998, 2004; Mueller, 2003; Koczy, 2012). In the case of the constructivist paradigm, it is primarily the arguments and behavioral norms internalized in the process of socialization that determine the outcome of the decision-making process in the Council, and not the voting weights assigned to member states (Risse, 2000, 2009; Lewis, 2007, 2010; Aus, 2008; Clark, Jones, 2010; Naurin, 2010). On the other hand, research carried out by Warntjen (2017) demonstrates that by good argumentation of the position presented in the course of negotiations in the Council, it is possible to influence the outcome of the decision-making process. However, more can be achieved using good argumentation together with a blocking coalition, rather than using argumentation alone. On the basis of an analysis of all the legislative procedures on environmental policy discussed in the Council between the first round of Eastern enlargement and the entry into force of the Treaty of Lisbon, he showed that the probability of success of requests increases when member states requesting a change constitute a blocking minority. The research also shows the existence of a positive relationship between the probability of success of a member state's requests and the number of votes backing a proposal. In addition, requests that have been allowed for in the Council's common position are almost always included in the final legislative act.2

The increase in the number of decisions made under the ordinary legislative procedure (previously the co-decision procedure) and the special legislative procedures, along with the important extension of the group of EU member states, presented a challenge to ensure the efficiency of the process of joint decision-making. The non-treaty principles of common proceeding in the legislative process developed by the European Parliament, the Council and the Commission, have helped to reduce the average time required to adopt decisions. However, this was achieved at the expense of transparency of the decision-making process, in which decisions consequently began to be developed mainly through inter-institutional ne-

² Further studies to show the extent to which the results obtained by Warntjen (2017) also apply to other policy fields are necessary.

gotiations conducted in trilogues and informal forums (Brandsma, 2015; Bressanelli et al., 2016; Farrell, Héritier, 2003). The Council enters into negotiations in trilogues only when a coalition of member states ensuring the adoption of the initiative proceeded in this institution has been formed (Roederer-Rynning, Greenwood, 2015). Thus, the distribution of weighted votes in the Council affects its negotiating mandate in the trilogue.

Following the entry into force of the Treaty of Lisbon, the evolution of a compromise culture in the Council can be observed (Novak, 2013). In the case of decisions taken by a qualified majority, objections or abstentions by states unable to block the decision are considered excessive and contradictory to the prevailing political culture. Member states' representatives in the Council often do not register their opposition, even when they are dissatisfied with the result of negotiations, which is the result of implementing the blame avoidance strategy, i.e. striving to avoid accusations of ineffective defense of national interests. There is also an informal rule that, under the ordinary legislative procedure, the whole Council should defend the common position reached in this institution before the European Parliament.

Using a multi-level logistic regression analysis, Bailer, Mattila and Schneider (2015) demonstrate that socio-economic indicators have a significant impact on the voting behavior of the member states in the Council. They conclude that redistributive conflicts substantially affect decision making in the Council, especially in the case of such policy domains as agriculture, economic and financial affairs, fisheries, and the environment. It can, therefore, be assumed that the ability to build a coalition in the Council should be particularly important for decisions taken in the above-mentioned areas.

Following the ratification of the Lisbon Treaty by member states, under article 16 (3) of the Treaty on European Union, qualified majority voting (QMV) became the default method of adopting decisions in the Council, and the Treaty of Lisbon significantly expanded the scope of use of this method of voting (Miller, Taylor, 2008). As a consequence, the significance of the ability of member states to form coalitions within the Council in order to influence the outcome of this institution's decision-making process increased.

In light of the research presented in the literature on the subject, there is no doubt that decisions in the Council are made primarily through negotiations, and the formation of a blocking coalition significantly affects the negotiating power of member states.

Research design

The purpose of this study was to obtain an answer to the following three research questions.

Question 1 (Q1): What impact will the UK's withdrawal from the EU have on the ability of member states to build small minimally blocking coalitions (SMBCs)?

It should be borne in mind that, when drafting a legislative initiative, the European Commission seeks to shape it in such a way as to increase the likelihood of adopting it under a particular legislative procedure. To this end, it can also use other competences conferred upon it and the information advantage it has (Pollack, 2003; Tallberg, 2006). As a result, it is difficult to build up a blocking coalition in the Council consisting of a large number of states, especially in the case of the dual majority voting system in force in the Council. In connection with the fact that decisions in the Council are made through consensual negotiations, member states evaluate the system of weighing votes in this institution through the perspective of possible allies to be won and coalitions predicted to be formed for specific, predictable issues (Moberg, 2007). In connection with the fact that it is very unlikely to build a blocking coalition consisting of a large number of states, the key to its creation is the EU population criterion. Therefore, it can be assumed that the ability of small and medium-sized states to form small minimally blocking coalitions will be reduced after Brexit, as the UK's withdrawal from the EU will significantly impede the winning over of coalition partners with a sufficiently numerous population.

Question 2 (Q2): How will Brexit affect the attractiveness of the Visegrad Group as a potential partner in creating blocking coalitions?

The Czech Republic, Poland, Slovakia and Hungary are trying to coordinate their positions presented in the Council and constitute one of the few formats of cooperation between EU countries in which such cooperation is successfully implemented on the most important issues. The total population of the Visegrad Group is over 63.6 million people, hence, it is bigger than the population of Italy, and comparable to the population of Great Britain or France. After the UK's withdrawal from the EU, it will be very difficult to build a blocking coalition if at least three out of the five member states with the largest populations refuse to take part in it. This may increase the attractiveness of the Visegrad Group as a potential coalition partner. In order to answer the research question posed, several simulations of voting in the Council were carried out, departing from the assumption that all coalitions in the Council are equally likely.

Question 3 (Q3): How will the ability of Council members to develop minimally winning coalitions change as a result of Brexit in the case where a European Commission's initiative is not supported by two of the five member states with the largest populations?

If there is no support of some member states for a legislative initiative, the likelihood of blocking it in the Council significantly increases, and then it may be assumed that this will have an impact on the selection and aggregation of interests at the stage of draft preparation by the European Commission. Thanks to finding an answer to the research question, one can determine how the actual threshold of the number of states for QMV decisions adopted in the Council on the initiative of the European Commission will change in the case of opposition of two of the five member states with the largest populations, assuming that the other members of the Council are equally likely to support the initiative or to contest it by voting against, or by abstaining from voting.

Answering the above-mentioned research questions will also make it possible to verify the hypothesis that the assessment of the states' ability to block decisions in the Council, made on the basis of the Preventive Power Index, differs fundamentally from the results of the analysis focusing on the construction of small minimally blocking coalitions and to adopt the assumption that not all coalitions are equally likely.

In order to find an answer to the research questions posed it is required to solve a significant methodological problem. In non-cooperative game theory, the existing procedures and positions adopted by the players are taken into account, however, only individual decisions are generally analyzed in this way, and the ability to make generalizations is limited. In turn, in cooperative game theory, such factors as procedures and positions are not taken into account. This research constitutes a 'third way' between the research perspectives determined in this manner, and thus is an innovative research approach.

In this study, the theory of n-person weighted voting games was applied differently than in the case of the studies on the voting power of states in the Council, using mathematical voting power indices. It is not single coalitions of states in the Council that are the center of analysis, but complementary pairs of them. In the case of adopting decisions in the Council by qualified majority, abstaining from voting is, *de facto*, a vote against the adoption of an initiative. This consequently leads to

the simplification of the positions taken by member states, since every decision involves the creation of two coalitions in the Council. The term 'coalition' means any set of players ready to support a specific initiative, or to refuse to support it, irrespective of the motivation behind the positions taken by individual players. The first coalition includes states ready to support an initiative. The other one groups players that refuse to give it their support, striving to reject such a proposal, or to introduce significant changes into it.

If, for a voting game, the number of voters equals n, then $N = \{i_1, i_2, ..., i_n\}$ is a nonempty and finite set of voters. Any subset $S \subseteq N$ is called a coalition. If under the voting rule the subset S is sufficient to adopt a decision then subset S has the value $\boldsymbol{v}(S)=1$, otherwise subset S has the value $\boldsymbol{v}(S)=0$. The subset S constitutes a winning coalition $S \in W$ if and only if $\boldsymbol{v}(S)=1$. The voter S is a critical member of the coalition S if $\boldsymbol{v}(S)=1$ but $\boldsymbol{v}(S-\{i\})=0$. The set of minimal winning coalitions is denoted as S is said to be a minimal winning coalition $S \in S$ if no proper subset of S belongs to S belongs to S (von Neumann, Morgenstern, 1944, p. 430).

The subset S is a blocking coalition $S \in B$ if $S \notin W$ and $N - S \notin W$. The set of minimal blocking coalitions is denoted as MB. If $S \in B$ and none of the subsets of S constitutes a blocking coalition, then the set S will be called the minimal blocking coalition $S \in MB$.

The ability of member states to block decisions will be analyzed from the perspective of their ability to build SMBCs. First, it will be examined how the UK's withdrawal from the EU will affect the ability of individual states to form SMBCs in the Council. To this end, for each state, their share in the total number of all possible combinations of small minimally blocking coalitions numbering between four and eight members for the EU-28 and EU-27 will be calculated. The calculations will be made on the assumption that at least a majority of 55% of the countries, i.e. 16 Council members for EU-28, and 15 for EU-27, will be prepared to support a legislative initiative and, at the same time, the proposal will not be contested – by objection or abstention – by more than two member states with an individual population of more than 30 million people. As a result, the analysis will take into account the distribution of preferences in the Council and the role that the European Commission plays in the decision-making process thanks to having agenda-setting power (Kleinowski, 2016, pp. 152-158).

Performing a prospective analysis, it is difficult to predict which positions will be presented by individual members of the Council, especial-

ly in the case of legislative initiatives that will be presented only in the future. However, based on previous empirical experience, it is possible to predict the distribution of preferences in this institution. According to research carried out by Thomson (2011), even in the case of draft legislative acts prepared by the European Commission which caused great controversy and divisions within the Council, it was very difficult to create a blocking coalition of 12–13 member states. At the same time, as a rule, there were no more than two EU countries with a population exceeding 30 million people in opposition. In the case of qualified majority voting in the Council, there are no cases in which a notified initiative is not supported by three large member states (Kleinowski, 2012).

Adopting the assumption that a project presented by the European Commission will enjoy the support of at least 55% of EU countries and will not be contested by more than two 'large' states, makes it possible to ignore a huge number of coalitions in the Council in the analysis, the emergence of which is theoretically possible, but unlikely in practice due to the role the European Commission plays in the decision-making process. This assumption makes it possible to include in the analysis only those blocking coalitions in the Council that are created in order to obtain concessions from the majority supporting the initiative, or aiming at rejecting it. This results from the fact that if the voting threshold is higher than 50%, then a coalition complementary to a minimally blocking coalition is another minimally blocking coalition.

Let us assume that there are 100 deputies in a sample council, each of whom has one vote, and 51 votes are required to adopt a decision. If exactly half of the members of this council support the adoption of a certain decision, and the other half oppose it, then two minimally blocking coalitions will be formed. The first will be formed by the deputies striving to push through the decision, but not having the majority required to do so. The second coalition will consist of deputies effectively blocking the submitted proposal.

The analysis of the ability of member states to build SMBCs seems to be more consistent with the practice of decision-making in the Council, in particular when departing from the assumption that all coalitions are equally likely. It makes it possible to determine how a change in the system of weighing votes in the Council affects the relative ability of individual states to create this kind of coalition, taking into account the decision threshold and the distribution of voting weights. From the perspective of individual member states, it makes it possible to identify the key partners

needed to set up blocking coalitions. As a result, it becomes possible to assess the reality of individual alliances by comparing the position held by a given government in respect of its key issues with the preferences of key partners needed to form a blocking coalition.

Analyzing the impact of Brexit on the ability of Council members to build minimally winning coalitions, in a situation where the European Commission's initiative meets with opposition expressed by two of the five states with the largest populations, requires a departure from the assumption that voting 'for' or 'against' an initiative by each member state is equally likely, and that they decide on how to vote independently of each other.

The simulations of voting in the Council were carried out using the POWERGEN 4.0 program created by the author. It makes it possible to determine the number of minimally blocking coalitions for individual EU countries depending on the number of Council members forming it. The program makes it possible to generate blocking coalitions on the assumption that each such coalition must consist of at least four member states.

The size of the EU states' populations used to simulate voting in the Council was determined on the basis of Eurostat's official data for 2016.³

The impact of Brexit on the blocking power of the member states in the Council measured using the Preventive Power Index

James Coleman (1971) proposed the Preventive Power Index as a tool to measure the ability to block decisions by voting body members. It is calculated as the quotient of the number of winning coalitions of which a given 'player' is a critical member, and the total number of winning coalitions. The index indicates the percentage by which the number of winning coalitions will decrease if a given voting body member does not support the initiative.

Table 1 illustrates how the value of the Preventive Power Index for member states in the Council will change as a result of the UK's withdrawal from the EU, assuming that the creation of each theoretically possible coalition in this institution is equally probable. Both before and after the UK's withdrawal from the European Union, Germany, which is a critical

³ Eurostat, *Usually resident population on 1 January* (last update 02.10.2017), http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_urespop&lang=en, 18.02.2018.

member of around 75% of winning coalitions in the EU-28 and almost 79% of such coalitions in the EU-27, is by far the most capable of blocking decisions in the Council. After Brexit, the ability to block decisions in the Council increases only in the case of the five most populous EU countries.

Table 1
The change of the blocking power of the states in the Council – measured using Preventive Power Index – for decisions adopted by qualified majority after the UK's withdrawal from the EU

	EU 28	EU 27 after	Changa relati	ve to EU 28 states
State	states	Brexit	Change relati	ve to EU 20 states
	PPI	PPI	PPI change	PPI change (%)
Germany	0.7480	0.7897	0.0417	5.57
France	0.6157	0.6563	0.0406	6.59
United Kingdom	0.6049	_	_	-
Italy	0.5739	0.6055	0.0315	5.50
Spain	0.4512	0.5023	0.0510	11.31
Poland	0.3698	0.428	0.0583	15.77
Romania	0.2739	0.2638	-0.0102	-3.72
Netherlands	0.2549	0.2450	-0.0100	-3.92
Belgium	0.2112	0.1992	-0.0121	-5.72
Greece	0.2076	0.1953	-0.0123	-5.94
Czech Republic	0.2051	0.1926	-0.0125	-6.09
Portugal	0.2043	0.1918	-0.0125	-6.13
Sweden	0.2018	0.1891	-0.0127	-6.30
Hungary	0.2006	0.1878	-0.0128	-6.38
Austria	0.1924	0.1790	-0.0134	-6.95
Bulgaria	0.1810	0.1667	-0.0143	-7.88
Denmark	0.1703	0.1553	-0.0150	-8.81
Finland	0.1685	0.1534	-0.0151	-8.98
Slovakia	0.1681	0.1530	-0.0152	-9.02
Ireland	0.1627	0.1471	-0.0156	-9.59
Croatia	0.1592	0.1433	-0.0159	-9.97
Lithuania	0.1496	0.1330	-0.0166	-11.11
Slovenia	0.1435	0.1264	-0.0171	-11.92
Latvia	0.1428	0.1256	-0.0172	-12.02
Estonia	0.1380	0.1204	-0.0175	-12.71
Cyprus	0.1345	0.1167	-0.0178	-13.23
Luxembourg	0.1325	0.1145	-0.0179	-13.55
Malta	0.1314	0.1134	-0.0180	-13.73

Source: Own calculations.

Nominally, the PPI value increases to the greatest extent for Poland and Spain. These two countries also record the highest increase in relation to the PPI value for the voting system in the Council of 28 members. In the case of all other countries, the value of the above-mentioned voting power index falls. At the same time, a relationship according to which, along with the declining population of a Council member, the reduction of its ability to block decisions measured by the PPI increases, can be observed.

If Germany and France present a common position in the Council, in this case the Franco-German tandem is an indispensable member of over 99% of possible winning coalitions, both before and after Brexit.⁴ This means that although building a winning coalition in the Council without the participation of Germany and France is theoretically possible, in practice it is completely unlikely. This explains why situations where the German-French tandem would have to make an effort to form a blocking coalition do not occur in the Council.

The impact of Brexit on the ability of member states to build small minimally blocking coalitions in the Council

Due to the specific nature of the decision-making process in the Council, the political culture prevailing in the EU legislature, and the actions of facilitators in the form of the European Commission, the President of the European Council and the rotating presidency, it is difficult to form a blocking coalition consisting of a relatively large group of states on the forum of this institution.

Table 2 presents how often individual EU states are an indispensable member of small minimally blocking coalitions in the Council, and to what extent this will change after Brexit⁵ (the number of potential SMBCs with the participation of individual EU states is presented in Appendix 1). It should be noted that after the UK's withdrawal it will be very difficult to build a four-state blocking coalition without the support of Germany, which in 96.9% of cases is an indispensable member of such coalitions.

⁴ After the UK's withdrawal from the EU, in the case of presenting a common position by Germany and France, these countries will be an indispensable member of 99.99% of possible winning coalitions.

⁵ Assuming that an initiative of the European Commission will enjoy the support of at least 55% of member states.

Prior to Great Britain's withdrawal from the EU, it was impossible to create a minimally blocking coalition consisting of four states without the participation of Germany, however, there were only seven such potential coalitions, whereas after Brexit this number will increase to 325. At the same time, the percentage of minimally blocking coalitions (SMBCs) with the participation of this state, numbering from five to eight members, is clearly reduced. This does not mean, however, that Germany's ability to build blocking coalitions decreases, since the number of four or five-state SMBCs with its participation increases from seven to 315, and it should be borne in mind that the total number of possible coalitions in the Council after Brexit will be reduced by half.

Table 2

Participation of EU states in minimally blocking coalitions in the Council, numbering from four to eight members, assuming that a proposed initiative is supported by at least the minimum required number of Council members, and at most two states with a population of more than 30 million object to it (in %)

			EU 28			EU 27 after Brexit					
Member state	Num	ber of	coalitic	n men	bers	Num	ber of coalition members				
	4	5	6	7	8	4	5	6	7	8	
1	2	3	4	5	6	7	8	9	10	11	
Germany	100.0	98.4	87.7	64.6	49.7	96.9	66.0	51.4	36.9	26.7	
France	71.4	39.3	38.8	40.6	39.8	60.0	39.4	43.0	44.7	42.0	
United Kingdom	14.3	45.2	37.6	41.1	39.8	0.0	0.0	0.0	0.0	0.0	
Italy	14.3	17.1	31.4	38.0	39.8	39.1	50.8	35.6	33.9	36.8	
Spain	0.0	0.0	4.4	11.8	21.6	3.7	31.2	46.2	47.5	43.9	
Poland	0.0	0.0	0.1	3.9	9.2	0.3	12.6	23.9	35.7	43.2	
Romania	100.0	50.0	29.4	35.0	36.8	18.2	21.2	28.3	29.5	33.8	
Netherlands	42.9	42.8	29.3	31.0	36.6	15.7	34.7	23.8	28.0	32.8	
Belgium	14.3	23.5	26.4	30.6	32.6	13.2	14.9	27.0	27.5	32.2	
Greece	14.3	20.3	28.7	30.9	32.3	12.9	14.0	24.9	28.4	33.0	
Czech Republic	14.3	19.8	26.3	30.4	32.8	12.0	18.6	24.8	27.9	31.8	
Portugal	14.3	19.8	25.8	29.8	32.5	12.0	17.7	25.1	28.6	32.6	
Sweden	0.0	22.2	26.6	30.0	32.0	11.7	19.8	23.2	28.6	33.1	
Hungary	0.0	21.1	26.8	29.8	31.8	11.7	18.9	23.0	28.9	33.1	
Austria	0.0	16.0	26.7	31.4	32.4	11.4	16.1	18.8	29.9	31.9	
Bulgaria	0.0	11.2	25.0	25.9	32.4	9.8	19.6	20.4	27.5	30.8	
Denmark	0.0	9.4	19.7	24.3	31.4	8.3	11.9	23.1	26.1	31.4	
Finland	0.0	8.6	19.4	24.8	30.8	8.3	10.5	23.4	25.4	32.0	
Slovakia	0.0	8.3	19.4	25.0	30.8	8.0	12.4	22.8	25.5	31.9	
Ireland	0.0	7.2	17.1	23.4	29.4	7.4	10.3	20.3	25.0	31.2	

1	2	3	4	5	6	7	8	9	10	11
Croatia	0.0	6.1	15.6	23.2	28.2	7.1	9.8	17.8	24.4	30.7
Lithuania	0.0	4.0	10.3	18.7	25.9	6.8	8.2	13.1	19.9	26.1
Slovenia	0.0	2.9	7.5	14.8	22.3	5.2	10.0	10.8	17.3	23.3
Latvia	0.0	2.7	7.1	14.5	21.7	5.2	9.6	10.5	16.9	22.8
Estonia	0.0	1.6	5.4	10.5	16.9	4.0	8.4	7.0	13.4	18.6
Cyprus	0.0	1.1	3.3	7.2	12.9	3.7	6.1	5.3	9.7	14.2
Luxembourg	0.0	0.8	2.4	5.0	9.8	3.7	4.4	3.7	7.1	11.2
Malta	0.0	0.5	1.9	3.9	7.7	3.7	3.0	2.9	5.8	9.0

Source: Own calculations.

Thus, Germany's ability to build four-state, and so the smallest possible blocking coalitions, will significantly increase, thus compensating for the reduction of ability in this respect in the case of coalitions with a higher number of members. This is probably the result of the large population of this country, together with the significant decrease in the total population of the EU after the UK's withdrawal. It should also be noted that in the case of Germany, the group of countries that may be potential allies in the case of creating SMBCs consisting of four countries clearly expands (from nine to 26 member states).

After Brexit, the number of four or five-state blocking coalitions in the Council possible to be built by the government in Paris will have increased almost twofold, from 152 to 364. France will also benefit with regard to the formation of SMBCs numbering from six to eight members. In turn, the Italians will create SMBCs consisting of five states more easily, since they will be a critical member of more than half the possible forms of this type of coalition. After Brexit, it will be easier for the three largest EU countries to find partners to build a blocking coalition consisting of four members. In the case of Germany and France operating in tandem, only two member states whose total population amount to just over 1.6% of the EU population will be needed to form such a coalition. This means that it will be difficult to force through solutions in the Council which are against the position of two of the three largest countries. Germany, especially in partnership with France, Italy, Spain and, to a lesser extent, with Poland, will gain a lot of ease in building blocking coalitions. It will be very difficult to isolate the government in Berlin so that it is unable to create a blocking coalition in a matter that is of interest to it. Thus, this state will almost automatically become one of the key players for adopting a legislative initiative in the Council. As a consequence, when preparing

a draft legislative initiative, the European Commission will have to take due account of the position of the government in Berlin. In turn, building a blocking coalition consisting of four countries without the participation of Germany will be very unlikely in practice.

After the UK's withdrawal from the EU, the role of Spain and Poland in creating potential SMBCs will increase several times, but in the case of coalitions consisting of four or five countries, it will remain clearly smaller than in the case of Germany, France and Italy. Romania and the Netherlands after Brexit will become much less important partners in building blocking coalitions counting four to five members. In turn, states with populations of less than 15 million will be more likely to become potential coalition partners in the smallest possible blocking coalitions. In particular, a significant difference in this respect is visible in the case of Council members whose populations are between 7 and 12 million. Member states with a population of less than 6 million people will be more likely to be a partner in SMBCs with four to six members.

After Brexit, the number of possible SMBCs consisting of four to six members will increase, as it will be easier for the three member states with the largest populations to find coalition partners with a sufficiently large population. At the same time, the number of SMBCs that can be created by a group of five to eight states will be reduced.

Table 3 shows how the ability of the Visegrad Group to build small blocking coalitions will change after Brexit. In the group of 28 EU countries, the creation by the V4 of a minimally blocking coalition consisting of a maximum of eight members in each case requires the support of Germany, and the role of this state is also crucial in the case of coalitions of nine members. In addition, Romania and the Netherlands are critical partners for the creation of the above-mentioned SMBCs. This is particularly evident in the case of 58 coalitions consisting of eight countries (V4 + 4), a critical member of which is always Germany, in 37 cases Romania, and in 21 cases the Netherlands. Thus, in practice, in view of the frequent divergence of interests between the V4 and Germany and the Netherlands, the ability of the Czech Republic, Hungary, Poland and Slovakia to build SMBCs is small, especially considering that the governments in Paris and Berlin tend to coordinate their position presented on the EU forum.

Following the UK's withdrawal from the EU, the role of the Visegrad Group in building SMBCs may increase. The number of minimally blocking coalitions which the V4 will be a critical member of will increase. This is particularly evident in the case of coalitions with six to nine coun-

tries. The number of partners in the Council, in cooperation with which the Visegrad Group countries will be able to build blocking coalitions, will also increase significantly. For the V4, Germany will be a key partner only in the case of blocking coalitions consisting of six or seven states. On the other hand, in the case of coalitions with eight to nine members, such partners may be, in particular, Italy or France and, to a lesser extent, also Spain.

Table 3
The ability of Visegrad Group countries to create small, minimally blocking coalitions, assuming that a proposed initiative is supported by at least the minimum required number of Council members, and at most two states with a population of more than 30 million object to it

Member states			UE 2	8		UE 27						
co-creating	Nu	mber o	f coaliti	ion mer	nbers	Num	ber of	coaliti	ion mer	nbers		
a coalition	V4+2	V4+3	V4+4	V4+5	V4+6	V4+2	V4+3	V4+4	V4+5	V4+6		
1	2	3	4	5	6	7	8	9	10	11		
Germany		1	58	237	496	5	27	40	28	19		
France		_	_	73	316	_	12	81	207	327		
United King- dom		_	_	49	297	_	_	_	_	_		
Italy		_	_	15	181	_	2	84	223	448		
Spain		_	_	_	2	-	_	4	69	395		
V4		1	58	374	1292	5	41	209	527	1189		
Romania		1	37	198	615	1	9	77	106	270		
Netherlands		1	21	204	550	1	7	53	124	282		
Belgium		_	19	123	512	1	3	36	153	351		
Greece		_	17	118	505	1	2	47	157	357		
Portugal		_	15	120	478	1	2	44	135	353		
Sweden		_	14	122	454	_	15	42	129	379		
Austria		_	13	89	437	_	11	30	194	358		
Bulgaria		_	10	73	443	_	7	40	135	362		
Denmark		_	8	62	399	_	5	41	135	389		
Finland		_	7	67	395	_	4	46	136	386		
Ireland		_	6	62	333	_	4	35	131	384		
Croatia		_	4	65	303	_	3	38	122	387		
Lithuania		_	2	49	258	_	2	25	113	362		
Slovenia		_	1	39	196	_	2	17	88	317		
Latvia		_	_	40	197	_	2	17	85	304		
Estonia		_	_	25	152	-	1	16	63	239		
Cyprus		_	_	18	98	_	1	8	47	195		
Luxembourg		-	-	13	75	-	1	8	31	148		
Malta		-	-	9	60	-	1	7	24	122		

1	2	3	4	5	6	7	8	9	10	11
V4 share in the	0%	0.04%	1.06%	4.05%	10.38%	0.6%	2.5%	6.7%	11.7%	21.4%
general number										
of coalitions										
with a given										
number of										
members										

Source: Own calculations. {ostatnia pozycja % a co pozostałe}

The impact of the lack of support for a legislative initiative by the five member states with the largest populations on the actual decision-making threshold in the Council

Table 4 illustrates how the actual threshold of the number of states needed to adopt a decision in the Council on the initiative of the European Commission changes in a situation where opposition is expressed by two selected states with the highest populations. In the case of the EU-28 facing the opposition of any two states from among Germany, France, Italy, Spain or Poland, it is possible to create a winning coalition consisting of 16 states. However, in the absence of support for an initiative by Germany or France, it is by far the most difficult. It is much easier to build a winning coalition in the Council against the opposition of France and Italy than in the case when one of these two countries contests the initiative together with Germany. The Visegrad Group is a more interesting partner to build a blocking coalition with than Poland alone. However, the negotiation position of the government in Berlin is enhanced more by cooperation with France or Italy, than with the Visegrad Group.

After the UK's withdrawal from the EU, it will be very difficult to create a winning coalition facing the opposition of Germany and France or Germany and Italy. This means that while preparing a legislative initiative, the European Commission will have to take into account even more the preferences of the three EU member states with the largest populations, and above all Germany. As a consequence, Brexit will lead in this respect to a more pronounced imbalance between the five member states with the largest populations.

After the UK's withdrawal from the EU, it will be much more difficult to build a winning coalition in the Council in the face of the Visegrad Group contesting an initiative together with one large member state, in particular when presenting a common position with the German government.

Table 4

The actual threshold of the number of states for QMV adopted decisions in the Council, on the initiative of the European Commission, in the case of opposition of selected states

		EU 28			EU 27 after Brexit	
States opposing the initiative	minimum number of states in the winning coalition	number of minimal winning coalitions with the smallest possible number of members	number of all minimal win- ning coalitions	minimum number of states in the winning coalition	number of minimal winning coalitions with the smallest possible number of members	number of all minimal win- ning coalitions
Germany, France	16	87	4,174	20	10	55
Germany, Italy	16	086	8,163	18	5	191
Germany, Spain	16	44,535	60,726	15	19	2,864
Germany, Poland	16	141,672	157,559	15	1,149	8,682
France, Italy	16	48,717	6,5049	15	23	3,151
France, Spain	16	265,586	280,735	15	9,417	21,683
France, Poland	16	432,545	442,185	15	52,535	68,709
Italy, Poland	16	522,717	531,680	15	111,184	127,595
Italy, Spain	16	375,147	388,785	15	30,533	45,752
Spain, Poland	16	639,089	650,383	15	381,713	390,162
Germany, V4	16	876,9	7,664	15	1	71
France, V4	16	2,9277	29,689	15	1,681	2,243
Italy, V4	16	37,231	37,497	15	4,491	5,663
Spain, V4	16	48,863	48,930	15	24,993	25,458

Source: Own calculations.

In contrast to the EU of 28 countries, for Germany, cooperation with the Visegrad Group to enhance its negotiating position in the Council may be a viable alternative to cooperation with Italy or even France. In the case of absence of support for a legislative initiative of the European Commission on the part of Germany, France and Italy, the creation of a winning coalition will become practically impossible, since all other members of the Council, i.e. 24 states, would have to participate in it.

Conclusions

In response to the first of the research questions posed (Q1), it should be stated that the UK's withdrawal from the EU will have a significant impact on building small, minimally blocking coalitions in the Council. Theoretically, the ability of the five member states with the largest populations to create the above-mentioned coalitions will definitely increase, especially in the case of Germany, France and Italy. It will be easier for them to find coalition partners with sufficiently large populations, especially in the case of coalitions consisting of four countries. Countries with a population of less than 6 million people will also be much more likely to be potential members of small blocking coalitions. Creating SMBCs, it will also be easier to find an alternative to Romania and the Netherlands.

After Brexit, the attractiveness of the Visegrad Group as a potential coalition partner in the Council should increase (Q2) as the number of small minimally blocking coalitions with their participation will increase. The group of countries with which the V4 will be able to build blocking coalitions will also definitely widen, which means that, theoretically, it should be easier to find partners with similar interests.

In the case of the third of the research questions posed, it can be concluded that as a result of Brexit, it will be unlikely that the Council will adopt a decision against a position presented jointly by Germany and France. This is due not only to the political significance of these countries, but also to the fact that their total population will account for over 30% of the EU population. As a result, the European Commission, when preparing a legislative initiative, will have to take into account the position presented by the German-French tandem. The UK's withdrawal from the EU will probably make the shape of a possible compromise in the Council even more dependent on the preferences of Germany, France and

Italy. However, the V4 countries may join this group if they effectively coordinate their position presented on the EU forum.

The analyses of the ability of member states to block decisions using the PPI and small blocking coalitions reveal clear discrepancies. Taking into account all possible coalition combinations and using the index proposed by Coleman, the ability to build blocking coalitions of the five EU countries with the largest populations, and above all Poland, will increase after Brexit. At the same time, the UK's withdrawal should be unfavorable in this respect for all other members of the Council. However, the analysis of Brexit's influence on the creation of small SMBCs indicates that the change will be beneficial to the five most-populous member states, however, to Poland to the least extent, and the role of states with a population of less than 6 million inhabitants and, to a limited extent, of Council members with a population of between 7 and 20 million will also increase during the creation of SMBCs.

Annex

Table 5
The ability of EU states to form minimally blocking coalitions with a small number of members, while weighing votes according to the so-called 'double majority' system, before and after Brexit – assuming that a proposed initiative is supported by at least the minimum required number of Council members, and at most two states with a population of more than 30 million object to it

	UE 28						UE 27				
Member state	Nun	nber o	f coalit	ion mei	mbers	Number of coalition members					
	4	5	6	7	8	4	5	6	7	8	
1	2	3	4	5	6	7	8	9	10	11	
Germany	7	368	1,678	4,954	9,935	315	283	1,248	2,541	4,558	
France	5	147	742	3,112	7,962	195	169	1,043	3,083	7,173	
United Kingdom	1	169	720	3,157	7,961	_	_	_	_	_	
Italy	1	64	600	2,918	7,954	127	218	863	2,336	6,283	
Spain	_	_	85	907	4,313	12	134	1,121	3,277	7,503	
Poland	_	_	1	298	1,845	1	54	579	2,459	7,374	
Romania	7	187	563	2,683	7,355	59	91	687	2,037	5,779	
Netherlands	3	160	560	2,377	7,309	51	149	578	1,934	5,601	
Belgium	1	88	505	2,345	6,511	43	64	655	1,895	5,496	
Greece	1	76	549	2,369	6,461	42	60	604	1,960	5,645	
Czech Republic	1	74	504	2,332	6,546	39	80	601	1,927	5,437	

1	2	3	4	5	6	7	8	9	10	11
Portugal	1	74	493	2,289	6,494	39	76	609	1,972	5,570
Sweden	_	83	508	2,304	6,405	38	85	564	1,974	5,660
Hungary	_	79	513	2,288	6,362	38	81	558	1,996	5,662
Austria	_	60	511	2,408	6,467	37	69	457	2,063	5,442
Bulgaria	_	42	478	1,986	6,480	32	84	496	1,894	5,259
Denmark	_	35	376	1,867	6,274	27	51	560	1,798	5,370
Finland	_	32	372	1,900	6,154	27	45	567	1,752	5,471
Slovakia	_	31	372	1,916	6,158	26	53	553	1,761	5,447
Ireland	_	27	327	1,797	5,881	24	44	493	1,721	5,323
Croatia	_	23	298	1,780	5,630	23	42	432	1,679	5,253
Lithuania	_	15	197	1,437	5,183	22	35	317	1,371	4,457
Slovenia	_	11	143	1,134	4,460	17	43	262	1,191	3,986
Latvia	_	10	135	1,115	4,339	17	41	254	1,166	3,887
Estonia	_	6	103	806	3,370	13	36	171	926	3,172
Cyprus	_	4	64	552	2,581	12	26	129	666	2,429
Luxembourg	_	3	45	384	1,951	12	19	90	489	1,906
Malta	_	2	36	296	1,539	12	13	71	397	1,537
Total	7	374	1,913	7,673	19,985	325	429	2,427	6,895	17,085

Source: Own calculations.

References

- Aus J. P. (2008), The Mechanisms of Consensus: Coming to Agreement on Community Asylum Policy, in: Unveiling the Council of the European Union: Games Governments Play in Brussels, eds. D. Naurin, H. Wallace, Palgrave Macmillan, Basingstoke, pp. 99–119.
- Bailer S., Mattila M., Schneider G. (2015), Money makes the EU go round: The objective foundations of conflict in the council of ministers, "Journal of Common Market Studies", vol. 53, no. 2.
- Baldwin R., Widgrén M. (2003), Decision Making and the Constitutional Treaty: Will the IGC discard Giscard?, CEPS Policy Brief 37.
- Baldwin R., Widgrén M. (2005), *The Impact of Turkey's Membership on EU Voting*, CEPS Policy Brief 62.
- Brandsma G. J. (2015), Co-decision after Lisbon: The politics of informal trilogues in European Union lawmaking, "European Union Politics", vol. 16, no. 2.
- Bressanelli E., Koop Ch., Reh Ch. (2016), *The impact of informalisation: Early agreements and voting cohesion in the European Parliament*, "European Union Politics", vol. 17, no. 1.
- Bobay F. (2004), Constitution européenee: redistribution du pouvoir des États au Conseil de l'UE, "Économie et Prévision", no. 163.

- Clark J., Jones A. (2011), "Telling Stories about Politics": Europeanization and the EU's Council Working Groups, "Journal of Common Market Studies", vol. 49, no. 2.
- Coleman J. S. (1971), Control of Collectivities and the Power of a Collectivity to Act, in: Social Choice, ed. B. Liberman, Gordon and Breach, New York, pp. 269–300.
- Farrell H., Héritier A. (2003), *The Invisible Transformation of Codecision: Problems of Democratic Legitimacy*, SIEPS Report No. 7, Stockholm: Swedish Institute for European Policy Studies.
- Felsenthal D., Machover M. (1998), *The measurement of voting power. Theory and practice, problems and paradoxes*, Edward Elgar, Cheltenham.
- Felsenthal D., Machover M. (2004), Analysis of QM rules in the draft constitution for Europe proposed by the European Convention, "Social Choice and Welfare", vol. 23, no. 1.
- Hayes-Renshaw F., van Aken W., Wallace H. (2006), When and Why the EU Council of Ministers Votes Explicitly, "Journal of Common Market Studies", vol. 44, no. 1.
- Häge F. M. (2013), Coalition-Building and Consensus in the Council of the European Union, "British Journal of Political Science", vol. 43, no. 3.
- Heisenberg D. (2005), The Institution of 'Consensus' in The European Union: Formal Versus Informal Decision-Making in The Council, "European Journal of Political Research", vol. 44, no. 1.
- Kleinowski M. (2012), Consensual Negotiations or Voting Contestation of Legal Acts in the Council, "Studia Europejskie", no. 4 (64).
- Kleinowski M. (2012), The Council of the European Union Weighting System Influence on the European Commission Capability to Set the Agenda Issues of the Measurement, in: Potęgometria III, eds. M. Sułek, R. Kobryński, Oficyna Wydawnicza ASPRA-JR, Warsaw, pp. 151–170.
- Koczy L. (2012), Beyond Lisbon: Demographic Trends and Voting Power in the European Union Council of Ministers, "Mathematical Social Science", vol. 63, no. 2.
- Lewis J. (2007), The Janus Face of Brussels. Socialization and Everyday Decision Making in the European Union, in: International Institutions and Socialization in Europe, ed. J. T. Checkel, Cambridge, pp. 137–170.
- Lewis J. (2008), Strategic Bargaining, Norms, and Deliberation, in: Unveiling the Council of the European Union: Games Governments Play in Brussels, eds. D. Naurin, H. Wallace, Palgrave Macmillan, Basingstoke, pp. 165–184.
- Mattila M. (2008), Voting and Coalitions in the Council after the Enlargement, in: Unveiling the Council of the European Union: Games Governments Play in Brussels, eds. D. Naurin, H. Wallace, Palgrave Macmillan, Basingstoke, pp. 23–35.
- Miller V., Taylor C. (2008), *The Treaty of Lisbon: Amendments to the Treaty on European Union*, House of Commons Research Paper 09.

- Moberg A. (2007), Is the Double Majority Really Double? The Second Round in the Debate of the Voting Rules in the EU Constitutional Treaty, Working paper No. 290, Real Instituto Elcano, Madrid.
- Mueller D. (2003), Public Choice III, Cambridge University Press, Cambridge.
- Naurin D. (2010), Most Common When Least Important: Deliberation in the European Union Council of Ministers, "British Journal of Political Science", vol. 40, no. 1.
- Novak S. (2013), The Silence of Ministers: Consensus and Blame Avoidance in the Council of the European Union, "Journal of Common Market Studies", vol. 51, no. 6.
- Pollack M. A. (2003), *The Engines of European Integration. Delegation, Agency and Agenda Setting in the EU*, Oxford University Press, Oxford.
- Protocol (No 36) on transitional provisions (2012), "Official Journal of the European Union" C 326.
- Risse T. (2000), 'Let's Argue': Communicative Action in World Politics, "International Organization", vol. 54, no. 1.
- Risse T. (2009), Social Constructivism and European Integration, in: European Integration Theory, eds. A. Wiener, T. Diez, Oxford University Press, Oxford, pp. 159–176.
- Roederer-Rynning Ch., Greenwood J. (2015), *The culture of trilogues*, "Journal of European Public Policy", vol. 22, no. 8.
- Tallberg J. (2006), *Leadership and Negotiation in the European Union*, Cambridge University Press, New York.
- Thomson R. (2011), Resolving Controversy in the European Union: Legislative Decision-Making before and after Enlargement, Cambridge University Press, Cambridge.
- von Neumann J., Morgenstern O. (1944), *Theory of Games and Economic Behaviour*, Princeton University Press, Princeton.
- Warntjen A. (2017), Do votes matter? Voting weights and the success probability of member state requests in the Council of the European Union, "Journal of European Integration", vol. 39, no. 6.

Wpływ Brexitu na zdolność państw członkowskich UE do budowania koalicji w Radzie

Streszczenie

Przy wykorzystaniu autorskiego programu komputerowego wykonano symulacje głosowań w Radzie po wystąpieniu Wielkiej Brytanii z UE. W przypadku części z nich zastosowano innowację metodologiczną polegającą na odejściu od założenia, że powstanie każdej z możliwych koalicji jest równie prawdopodobne. Przeprowa-

dzona analiza wskazuje, że po Brexicie znacząco zmieni się zdolność członków Rady do tworzenia małych koalicji minimalnie blokujących. Jednocześnie ocena zdolności państw do blokowania decyzji w Radzie, dokonana w oparciu o Preventive Power Index, różni się zasadniczo od wyników analizy skupiającej się na budowie małych koalicji minimalnie blokujących. Prezentowane badania zostały sfinansowane przez Narodowe Centrum Nauki w ramach projektu no. UMO-2016/23/D/HS5/00408 (konkurs SONATA 12) zatytułowanego Wpływ brexitu i bezwarunkowego wprowadzenia systemu głosowania "podwójną większością" na proces decyzyjny w Radzie Unii Europejskiej.

Słowa kluczowe: Brexit, koalicje blokujące, Rada Unii Europejskiej, siła głosu