The Treaty of Nice and the Distribution of Votes in the Council – Voting Power Consequences for the EU after the Oncoming Enlargement

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Keywords

Abstract

The IGC 2000 had the objective to prepare the European Union for the enlargement. The aim of the present paper is to evaluate the Nice solution of the Council's decision-making rules from the perspective of the decision on the number of candidate countries which should join the EU in 2004, as proposed by the Brussels European Council in October 2002 and approved by the Copenhagen European Council last December. The evaluation is based on the comparison of the Nice solution with all the relevant proposals, which were presented to the IGC 2000. The results bring an assessment of the voting power effect of both the Nice rules and the proposals. The reason for this comparison consists in the fact that these proposals represented the spectrum of approaches considered as plausible, during the last IGC and some of them much earlier. Since ten designated candidate countries should be regular participants of the next IGC and since these proposals might be picked up again if the question of decision-making rules in the Council is reopened by the next IGC, the question of respective voting power consequences of the proposals for the EU25 should be answered. The method used for evaluation of voting power consequences of individual solutions is based on the Banzhaf index. The comparison leads to the conclusions that the distribution of voting power in the Council after enlargement to 25 members will be more even in terms of equitable representation of population of the member countries than most of other solutions proposed to the IGC, but is far from optimal as it disadvantages a group of smaller members to a greater degree than it disadvantages the most populous countries. Another conclusion is that the population criterion will not influence the voting power of member states after oncoming enlargement and would not be effective in any other dual weighted majority solution.

Kurzfassung

Die Regierungskonferenz (RK) 2000 hatte das Ziel, die Europäische Union auf die Erweiterung vorzubereiten. Zweck dieses Papiers ist es, die Nizza-Lösung hinsichtlich der Entscheidungsstrukturen im Rat zu evaluieren; und zwar aus der Perspektive der Einigung auf die Anzahl der Beitrittskandidaten, welche der EU im Jahr 2004 beitreten sollen, wie durch den Europäischen Rat Brüssel im Oktober 2002 beschlossen und durch den Europäischen Rat Kopenhagen letzten Dezember bestätigt. Die Beurteilung basiert auf dem Vergleich der Nizza-Lösung mit all jenen relevanten Vorschlägen, welche im Zuge der RK 2000 vorgelegt wurden. Die Resultate bringen eine Bewertung des Stimmgewichts-Effekts sowohl der Nizza-Regeln als auch der Vorschläge zutage. Der Grund für diesen Vergleich liegt in der Tatsache begründet, dass diese Vorschläge das Spektrum jener Ansätze repräsentieren, die während der letzten RK, und manche von ihnen viel früher, als plausibel angesehen wurden. Da zehn designierte Beitrittskandidaten reguläre Teilnehmer der nächsten Regierungskonferenz sein sollen und da diese Vorschläge wieder aufgegriffen werden könnten, falls die Frage der Abstimmungsregeln im Rat durch die nächste RK wieder releviert wird, sollte die Frage der Konsequenzen der entsprechenden Stimmgewichtungen in den Vorschlägen für die EU25 beantwortet werden. Die Methode, die für die Evaluierung der Stimmgewichtungskonsequenzen der einzelnen Lösungen herangezogen wurde, basiert auf dem Banzhaf-Index. Der Vergleich führt zu dem Schluss, dass die Verteilung der Stimmgewichtung im

Rat nach der Erweiterung auf 25 Mitglieder ausgeglichener im Sinne gleichwertiger Vertretung der Bevölkerung der Mitgliedstaaten sein wird als die meisten anderen der RK gemachten Vorschläge; sie ist jedoch dennoch weit vom Optimum entfernt, da sie eine Gruppe kleinerer Mitgliedstaaten in größerem Ausmaß benachteiligt als die bevölkerungsreichsten Staaten. Eine weitere Schlussfolgerung ist jene, dass das Bevölkerungskriterium die Stimmgewichtung der Mitgliedstaaten nach der kommenden Erweiterung nicht beeinflussen wird und dass es in keiner anderen Lösung einer doppelt gewichteten Mehrheit zum Tragen käme.

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1 Introduction

At the moment the institutional provisions of the Treaty of Nice come into force and become part of the new legal basis of the European Union, what will happen to the distribution of power in the Council? How will the process of enlargement influence this redistribution? The decision about the new decision-making mechanism in the EU was generally considered to be the most controversial topic of the final session of the Nice European Council in December 2000. The compromise that was finally reached was considerably criticized in both the media and academia. The present article seeks to evaluate the scope of the redistribution, to compare the final results with all the relevant proposals that were presented to the Intergovernmental Conference of 2000 and, last but not least to evaluate the solution from Nice from the point of view of the oncoming enlargement by ten new members in 2004, as these countries may be the parties to the next IGC and may have a role in the possible re-examining of the Nice solution.

2 Aim of the research

This project has sought to evaluate the final results of the last IGC as applied to the EU25 by reckoning the voting power of the Member States in the Council and to compare these results with all the variants of the solution for the redistribution of votes in the Council, which were debated by the IGC. The choice for 25 potential Member States is given by

   i.   the fact that the number of members and their composition are relevant parameters for measuring the voting power of individual members,

ii. the decision by the Copenhagen European Council in December 2002 declaring officially that the accession negotiations have been concluded with ten candidate countries with perspective of their joining the EU in 2004,

iii. the Brussels European Council in October 2002 has indicated not only which of the candidate countries should become members in 2004 but also how the institutional design for the Council from the Nice Treaty should be applied to 25 EU members as from January 2005 (SN 300/02, p. 14).

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Since the new Member States will probably take part in the next IGC, their relative position under the Nice decision-making rules is a significant aspect of the application of the last institutional changes, as it will influence their attitude towards the institutional agenda of the next IGC and may lead to modifications in their strategies towards the EU future development. Naturally, also the current Member States might find their position after enlargement changed and might be motivated to reconsider their attitude.

The comparison of the results from Nice with all the relevant proposals which were presented to the IGC 2000 and were discussed by it should bring an assessment of the voting power effect of the proposals which represented the spectrum of approaches considered as plausible – not only during the last IGC, but some of them much earlier – as they might be picked up again if the question of decision-making rules in the Council is reopened by the next IGC.

The evaluation of both the variants presented to the IGC and the results of the Treaty of Nice will be based on a comparison with a situation which is to come in 2004 when the ten candidate countries become new members of the EU, i.e. allotting them a number of votes in the Council according to the current model, without changing the decision-making procedure. This situation (extrapolation) should last only less than one year, as the new Nice rules will be applicable from January 2005.(1)

The paper is organized as follows: next section presents the main properties of the method chosen for the given task, the Banzhaf index as a measure of voting power, including the specific tools for assessment of differences among the variants under evaluation. Next comes a historical overview giving the background outline of the origins and development of the distribution of votes in the Council from the early EEC up to the last IGC concluded in Nice in 2000. In the following section all the variants of solution discussed by the IGC are presented, including the solution finally adopted. Each of the variants is assessed according to the criteria specified in the research method section. The last section summarises the findings and concludes that none of the evaluated variants, when applied to the European Union of 25 members, represents a well-balanced solution for the decision-making in the Council.

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3 Research method ⬆

The method used to evaluate the alternative models of the decision-making mechanism in the Council is based on a computation of the voting power of each member state in each model. This is done using the Banzhaf index (Banzhaf, 1965; Berg, 1997; Felsenthal, Machover, 1998), which measures the *probability* that a particular actor, given a certain distribution of votes and required quota, is able to influence the result of a particular vote. This method is based on the assumption that the voting power (VP) of an actor may be expressed by the measure of his presence in a 'swing'

position in all winning coalitions that would turn into losing ones by the defection of this actor. 'Swing' position here means a position that enables the member to pull the coalition down by a swing of his/her own vote. The Banzhaf index of voter x is the number of winning coalitions in which x is critical, divided by the number of all winning coalitions pulled down by any single voter, including voter x. The sum of normalized Banzhaf indices of all members of the decision-making body is 1.

It is assumed that all coalitions have the same probability of being created. The method takes no account of concrete conditions under which a particular decision is taken, e.g. the scope of consensus of the actors on a particular question, the closeness of general political or economic preferences, coalition-building potential, the role of agenda-setter, etc.

The application of the Banzhaf index has been used quite often as a method of evaluating the distribution of power in EU institutions, the Council in particular (Baldwin et al., 2001; Bindseil, Handtke, 1997; Felsenthal, Machover, 1997, 2000, 2001; Hosli, 1995, 1999; Laruelle, Widgrén, 1998; Laruelle, Valenciano, 2002; Raunio, Wiberg, 1998; Turnovec, 1996). Bearing in mind the arguments of the critics of using power indices for the evaluation of EU decision-making (see, e.g., the discussion in the *Journal of Theoretical Politics*, Vol. 11 (3), July 1999 and Vol. 13 (1) January 2001), the Banzhaf index may still be considered a proper method for this particular research task. The subject of evaluation comprises theoretical, as yet unused decision-making procedures, where nothing may properly be said – empirically speaking – about the agenda-setting power and political preferences of individual actors or other institutional influences, because more than one third (10 of the total 25) of the considered actors are not yet EU members and, by the time they join the EU, other institutional changes will very probably also have taken place (e.g. changes in the composition of the Commission and the EP). The Banzhaf index measures *a priori* voting power, not real current voting power. In that sense, it states the probability value of the nominal share of power/votes of individual Member State under given decision-making rules.

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The subject of evaluation is only one decision-making procedure of the Council, the so-called qualified majority rule as applied when the decision is being taken on the proposal of the Commission. Most of the decisions, which are made under this rule fall into the category of standard legislation, which is giving shape to the Community policies. We may say then that the main motivation of the representatives of the Member States (voters) is to *influence* these policies (policy-seeking approach) rather than to gain bigger share of the *executive power* (office-seeking approach) as a result of their presence in the winning coalition. The Banzhaf index is a measure assessing the *influence* of individual voter – I-Power – as compared to other methods for measuring voting power in terms of voter's taking part in gaining *prize* or office – P-Power, e.g. Shapley-Shubik index (for more detailed analysis, see Felsenthal, Machover, 1998, chaps. 3 and 6, esp. pp. 35-37, 160-161).

All the data related to the evaluated variants are presented in Table 1. The results of the computation of voting power for all considered variants are presented in Table 2.(2)

For indicating the differences among individual variants a method based on computation of Euclidean distance is used here: the square root of the sum of $(x_j - x_k)^2$. It says how close or distant the solution as a whole is compared to other solution; as a method for measuring the distance of two sets of values of variables. The lower this value is, the closer the solutions are (Table 3).

Since the demand for more democratic character of the EU decision-making was one of the major aims of the reform (e.g. CONFER 4750/00, p. 18) and the size of population was considered to be "the most objective criterion on which either to undertake the reweighting of votes or to construct the

dual majority system" (CONFER 4728/00, p. 2), the variants under consideration will be compared also from the point of view of *equitability*, i.e. how a particular decision-making procedure and required thresholds express the demand for the equitable representation of a single voter. The method used is based on the ratio of the resultant value of voting power of an individual Member State to the square root of its population (Felsenthal, Machover, 1998, p. 63). The values of the equitable share of power to which each Member State is entitled by the size of its population are attached to Table 2 to enable comparison with the data on VP. If the particular solution is equitable, these values (VP and equitable share, i.e. share of the square root of population) should be identical. The instruments for evaluation of each variant are the *minimal* and *maximal values of deviation* (where the ideal value = 1) and the *standard deviation* from the ideal value for the overall balance of the variant. The lower these values, the more equitable the solution (Table 4). The sequence of the variants in this table is given by the value of the standard deviation.

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The equitability may be considered as one of the methods, which can be used to assess how particular decision-making procedure complies with one of the formal criteria of democratic process, namely the criterion of voting equality at the decisive stage (Dahl, 1989, p. 109), as the Council is a body, which concludes the decision-making process and no entity within the EU can prevail over it.

The majority of the variants considered include the criterion of the size of population. The method for counting the relative size of the population of the EU is not explicitly set out in the Treaty; consequently, the method proposed during the IGC in the dual-majority variants was used. This procedure has the advantage that the results are then fully comparable.(3) Still, there is a problem: the application of this procedure(4) to 25 states, after the standard rounding off of each figure of weighting, gives a total of 998 (instead of the expected 1000 for any number of Member States). The materials of the IGC offer no hint how to solve such a situation,(5) so that all the calculations were made with the data, which give the sum of the weightings B 998 (see Table 1, cols. 5, 6, 7, 8, 9), accepting the risk that the results might be slightly flawed.

In presenting the research results both the present members and candidate states will be treated as groups: *big* (Germany, Britain, France, Italy, Spain + Poland), *medium* (the Netherlands, Greece, Belgium, Portugal + Czech Republic, Hungary), *minor-medium* (Sweden, Austria), *minor* (Denmark, Finland, Ireland + Slovakia, Lithuania, Latvia, Slovenia, Estonia) and *small* (Luxembourg + Cyprus, Malta), except in cases where the results for individual states are different from the group. Distributing the states into groups is not to suggest these states share certain qualities; it only reflects the fact that the allocation of weighted votes since the setting up of the EEC had distributed the Member States into distinct groups and that the majority of evaluated solutions had stuck to this approach. For the sake of explicitness the value of voting power will be presented in percentages (e.g. VP = 0.083 says that the probability of influencing the result of voting is 8.3 per cent).

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4 Historical Overview

The reform of institutions has been a long-time problem and task of the European Union. Each enlargement and each broadening of EC powers brought home the problem that institutional structures and decision-making mechanisms designed for the six original members of the EEC were inadequate for a grouping twice the size or even bigger. Among the wide range of specific institutional questions, the distribution of votes in the Council of Ministers stands out as the most

sensitive and controversial. The Council, being what it is – the main decision-making body in which member governments are represented –, was at the centre of attention during these discussions on possible institutional reform.

The requirement for a change in the distribution of votes in the Council is a result of a long-time process in which the relative weight of votes of the most populous states of the EU has decreased. The reason for that was the extrapolation of the existing quota of votes to new Member States, which aligned each of them to already existing groups within the EC/EU. In the community of the founding Six, the *big* states (Germany, France, and Italy) had four votes each, the middle-sized countries (the Netherlands and Belgium) had two each, and Luxembourg had one. Together the *big* commanded 70.59 per cent of the vote; the quota for the qualified majority was established at 12 votes. To prevent the *big* from out-voting the *small*, the votes of four states were needed whenever a decision was taken without a proposal of the Commission.

The number of votes allocated to each Member State was changed with the first enlargement, but the ratio among these numbers remained the same with the exception of Luxembourg. The majority of new members were states with medium or small populations; the notable exceptions were the UK and Spain. The five *big* continue to command 48 votes, which represent 55.17 per cent of the total of 87 votes. The quota for a qualified majority is 62 votes, which means that it remains at approximately the same level – 71.26 per cent. Twenty-six votes can block any proposal that needs a qualified majority for its approval. The logical conclusion from these numbers is that the peoples of the *big* Member States are under-represented in the most significant decision-making forum of the EU. On the other hand, it has to be recalled that not the peoples but the states are represented in the Council, and the states are supposed to be equal.

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The prospect of further enlargement, which became imminent in the 1990s, brought to mind the urgency with which the EU had to tackle the long-standing problem. The long queue of candidate members consists of thirteen states, most of which are the small and medium-sized countries of central and eastern Europe, the exceptions being Poland, Romania and Turkey. The alternative, to proceed as in all previous rounds of enlargement, allocating the number of votes according to the old formula, generally seemed unacceptable. The opinion was more or less resolutely expressed in the Protocol on the institutions, which was annexed to the Amsterdam Treaty, even though it seemed possible that the EU might be enlarged by five members, providing Member States found at least an interim solution to the redistribution of votes in the Council before the next IGC was summoned. But under German presidency in 1999 the decision was taken to give priority to conclude institutional reform before the enlargement process started. At the Cologne European Council of June 1999 the EU members decided to convene an Intergovernmental Conference on Institutional Reform within six months, with the task of preparing the necessary amendments to the Treaties before the end of 2000 (SN 150/99). The core topics were specified: the size and composition of the Commission, the weighting of votes in the Council together with finding a new threshold for qualified majority, and the possible extension of the qualified-majority voting in the Council.

Soon it became evident that one major topic had to be added to the list; the Treaty of Amsterdam introduced a ceiling on the total number of members of the European Parliament. The current rule for the distribution of seats if applied to new members would allow only a couple of them to be brought in; in the event that Poland were in the group, there could be only three or four. In general, there was little support among the EU members for breaking the newly established ceiling because the EP is already a huge body whose work is difficult to organize and whose functioning is costly.

The IGC started in February 2000 under Portuguese presidency. Shortly thereafter, the agenda of the

conference was extended by several new topics, but the original three together with the EP question remained at the centre of attention both of the negotiators and the interested public. Portugal at the end of its presidency presented a thorough overview of the alternative solutions of individual topics of the agenda (CONFER 4750/00). Next to stating the main aims of the reform – the future system had to 'reflect the dual nature of the Union ... a Union of States and a Union of peoples ... be equitable, transparent, efficient and easily understood by the citizens...' (CONFER 4750/00, p. 18) –, two basic approaches emerged on the question of redistribution of votes in the Council; (1) the dual-majority system – i.e. the two-criteria decision-making procedure where the decision to be taken would need to pass a dual threshold: (a) a majority of Member States or a given number of weighted votes and (b) a percentage of total population; (2) reweighting – i.e. the current system of weighted votes as the only criterion would stay in place but the distribution of votes to individual Member States would be changed. There had been a general consensus that the redistribution should be guided by the relative size of the Member State's population as the primary concern (CONFER 4750/00, p. 21). It had been also admitted that a political link existed between the weighting of votes in the Council and the other institutional questions: the size of the Commission and the distribution of seats in the European Parliament (CONFER 4750/00, p. 18).

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The second part of the IGC was under the French presidency. From July to December 2000 four separate documents specifically concerning the question of the redistribution of votes were presented by the presidency to the IGC (CONFER 4754/00; CONFER 4781/00; CONFER 4796/00; CONFER 4801/00). The general tendency apparent from these documents and especially from the summary reports of the French presidency, which were presented on the eve of the Nice European Council, was the preference of the majority of members for the one-criterion solution, i.e. the simple reweighting of votes (CONFER 4790/00; CONFER 4810/00). After the informal European Council in Biarritz in mid-October, it also became evident that the decision on the ultimate solution would be left to the Nice summit and would be sought in the interdependence of the three main institutional questions, i.e. together with the solution of the redistribution of EP seats and the decision on the number of commissioners.

The actual course of the European Council proceedings in Nice exceeded the worst expectations. The horse-trading on the main institutional questions resulted in a final solution that in several respects infringed the principals that had been part of the aims of the reform – namely, the principals of greater transparency, simplicity and clarity (Weizsäcker, Dehaene, Simon, 1999), by introducing a complex three-criteria decision-making procedure in the Council in place of the original one-criterion procedure, the principal of equal representation by allocating a different number of EP seats to states with commensurable populations, and, finally, breaking the ceiling of the total number of seats in the EP by increasing it to 732.

In December 2002, two years after the Nice European Council crowned the IGC on institutional reform, which had to prepare the EU for enlargement, the Member States concluded the accession negotiations with ten candidate countries. This was the first formal step indicating the concrete way of application of the new institutional provisions of the Nice Treaty. Conclusions of the preceding Brussels European Council in October provided the technical parameters, esp. setting the new thresholds for enlarged EU both for the period before the 1st January 2005, and after that date when institutional changes concerning the Council will take place. Ten candidate states passed the turning point and they should have the way to the negotiating table of the next IGC of the EU opened (SN 1247/1/01 REV1, p. 168).

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5 Variants included in computations of the Banzhaf index ⬆

All variants of the distribution of votes are included in <u>Table 1</u> together with all relevant additional data: the distribution of votes, the size of population, the threshold of the qualified majority and blocking minority, the minimal number of states constituting the qualified majority (and blocking minority) and a share of population corresponding to both. Each variant is presented in a numbered column (0 to 9), one-criterion variants use only weighted votes (i.e. weighting A), two-criteria variants use either weighted votes (A) + share of population (weighting B), or the majority of states (weighting C) + share of population (B), the solution from Nice uses all three.

<u>Table 1</u>

Current distribution of votes

The current distribution of votes in the Council of fifteen Member States serves as a basic reference point (<u>Table 1</u>, col. 0), particularly for the comparison of the position of Member States at present and after enlargement and at present and after January 2005, if no enlargement occurs by that date.

Current distribution of votes – extrapolation to 25 members

This variant was used by the IGC as a variant of reference (CONFER 4750/00, p. 65). It shows what the distribution of votes would be if current criteria – fitting new Member States into existent groups – were used after enlargement. It will be in fact applied for a limited period provided the enlargement would materialise before January 2005.

The accession of ten new members will naturally mean an absolute loss for all present Member States of approximately one third of their current VP. The ratio of the subtotal of VP of present Member States and the newcomers would be in percentages approximately 69:31 (<u>Table 2</u>, col. 1).

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In terms of equitability this variant would mean that the disproportion between the voting power and the size of population – measured by standard deviation (STD) – would be worse than it is now in the EU15 (<u>Table 4</u>, compare cols. 2 and 8)(6), mainly because the number of 'over-represented' states would be higher. The results seem to demonstrate that the situation of the *big* will, under the current rules, further decline after enlargement in 2004. Members of other groups will stay at about the same level with the exception of Denmark and Finland, which will suffer only minor loses.

6 Proposals of the IGC ⬆

The IGC was considering two basic strategies: either to leave the present system of decision-making intact and only redistribute the number of votes to Member States, including the candidates, or to change the system by adding the second criterion, namely the share of a Member State's population in the total population of the EU and combining it with either weighted votes or the criterion of the majority of Member States. An additional aspect of the solution was where to set the threshold of the qualified majority, both in terms of the share of votes and of the share of population.

6.1 A new weighting of votes ⬆

Limited reweighting (Portuguese proposal)

This variant is an example of the so-called 'political approach', which prefers to solve the redistribution question in a way that would keep the present balance (CONFER 4750/00, p. 21). This proposal was presented by the Portuguese presidency in its report to the Feira European Council. As the concrete number of votes allotted to the individual Member States in this variant had been changing slightly during the IGC in various versions of the proposal, the variant presented in the last note of the Presidency in November 2000 was used (CONFER 4801/00) (Table 1, col. 2).

In terms of voting power this variant would mean an absolute loss for all present Member States but a better position for the *big* group (+0.8 to 1 per cent compared to the extrapolation of the current rule) and a mildly worse position of all the others (–0.2 to –0.3per cent). The relative position of Member States and candidate states is comparable to the variant of extrapolation (in percentages, 76:24) (Table 2, col. 2).

Concerning the equitability of this solution, its overall balance is better than the extrapolation variant (STD = 0.367), and the values of minimal and maximal deviations are smaller, but it would be a markedly worse solution for the Netherlands, Denmark, Finland, Sweden and Slovakia.

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Generalized reweighting (Swedish proposal)

This so-called 'arithmetical approach' gives each Member State a number of votes equal to double the square root of its population expressed in millions, rounded off to the nearest figure (CONFER 4796/00). Although the relation between the size of population and the number of votes is not linear, this variant provides a distribution that gives Germany, the most populous country, more votes than other states in the *big* group (Table 1, col. 3). Since the basis for the allocation of votes is the size of the population of each state, the resultant distribution is breaking apart the former lines of division between the old established groups. This variant quite dramatically also changes the ratio between the number of votes of the biggest and the smallest – from the current 5:1 to 18:1.

The distribution of voting power under this variant follows the logic of the distribution of votes, but the decline of the VP value is more gradual. The position of the *big,* both in absolute and relative terms, is better than in the case of extrapolation of the current rules (+0.5 to 1.9 per cent); the Netherlands plus the *minor* and *minor-medium* states are also better off. Of all the one-criterion variants this variant yields the worst result for the *small* and Estonia. The share of present Member States compared to candidate states in terms of VP is higher (in percentages, 74:26).

This proposal represents the best solution in terms of equitability (Table 4, col. 7). The reason is that the distribution of votes was designed based on the same assumption as the method for measuring equitability: the principal of 'one person one vote' is adequately provided for in large assemblies by allotting to the constituency the weight equal to the square root of its size (for a reader-friendly explanation of this method, see Baldwin et al., 2001, pp. 37–38).

Substantial reweighting (Italian proposal)

This variant is another case of the 'political approach' to the redistribution of votes. It presupposes that the relation between population size and number of votes should be closer, but on the other hand it does not aim at destroying the existing groups of states (CONFER 4796/00) (Table 1, col. 4). The difference between the marginal number of votes is the biggest in this variant (33:3), but in relative terms it is lower than in the Swedish proposal.

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Of all one-criterion variants the distribution of voting power in this variant is most favourable for the *big*; its value would remain at comparable level as it currently is in the EU15 even after enlargement to an EU25 (11.2 à 10.3 per cent). Other groups would be considerably worse off compared to other one-criterion variants, including the extrapolation of current rules, except the *small,* which would be in a slightly better position than in the Swedish proposal (Table 2, col. 4). The relative difference between the *big* and the *small* is markedly larger than in the case of the extrapolation variant, but still smaller than in the Swedish proposal. The relative share of present Member States in the VP distribution of the EU25 would be the highest from all the variants: 76: 24.

From the point of view of overall equitability measured by standard deviation this proposal seems to be relatively good (Table 4, col. 5). Nevertheless, it contains a serious defect in that, of all variants, it has the lowest value of deviation (–0.440); that means, that the Latvian voter would have less than 60 per cent of his equitable representation. Another imperfection is that this solution is weighted in favour of the *big*. Large countries, which have a wider range of means to influence the political process in general, would be over-represented in this variant; all the others would be more or less under-represented, with the exception of Cyprus, Luxembourg and Malta.

6.2 Dual majority ⭧

Simple dual majority

The simple dual majority was a solution proposed by the Commission (CONFER 4701/00 pp. 39–40). Under this system the qualified majority would be reached by a majority of Member States (weighting C) and a majority of the EU population (weighting B). The total sum of all B weightings is expected to be 1000 with any number of Member States (CONFER 4745/00), but that is unfortunately not the case with 25 members (see note 3). The distribution of B weightings according to the size of population completely changes the relative position of the individual Member States. This change is balanced by the even distribution of C weighting – each Member State has one vote (Table 1, col. 5).

Compared to extrapolation of current rules this variant, in terms of voting power, does not seem to lead to radical changes. Nevertheless, some shifts of relative position are truly significant, namely the growing distance between Germany and each of the other *big* (10.2 per cent compared to between 5.6 and 7.5 per cent). On the other hand, the relative position of the *minor* and *small* would be considerably better than in the extrapolation variant, with the consequence that the distance between the *big* (without Germany) and these two groups would become distinctly smaller (from 5.6 to 7.5 per cent compared to 2.5 to 2.9 per cent); the relative difference among the *biggest* and the *small* therefore falls well below the present level of the EU15 and below the extrapolation variant. The share of present Member States would be about 69 per cent (Table 2, col. 5).

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The simple dual majority represents the worst solution from the point of view of equitability. It has the highest values of all indicators, except the minimal value of deviation. The trend is clearly in favour of the smaller countries.

Weighted dual majority

The weighted dual majority combines the current distribution of votes in the Council (A) with the population criterion (B) where the threshold is assessed at 58 per cent (CONFER 4796/00).

Reweighted dual majority (limited reweighting with the population net, a 58 per cent threshold)

Limited reweighting with the population net is an approach that strives to strengthen the position of Member States with large populations not only by including the population criterion expressed as weighting B but also by redistributing the votes in favour of these states. (The distribution of votes in weighting A is the same as in the Portuguese proposal.) In this variant the minimal population threshold stays at the present level – 58 per cent (CONFER 4796/00).

Reweighted dual majority (limited reweighting with population net, a 60 per cent threshold)

This variant is distinguished from the former only by raising the minimal population threshold to 60 per cent (CONFER 4796/00) so as to protect even further the states with large populations from possibly being overpowered by smaller countries.

The evaluation of the results of calculating voting power for these three variants of the weighted dual majority may be done together, since the results are very similar. In general, the combination of weighted votes (A) and the population criterion (B) does not bring about any change in voting power compared to the one-criterion variants, which use only weighted votes with the same quota. To conclude: the population criterion set at a considerably lower level of threshold than the quota of the weighted votes does not influence the voting power of Member States. The variant of the weighted dual majority, which uses the current distribution of votes, gives the same VP value as the extrapolation variant (Table 2, col. 6). The same may be said about both variants of limited reweighting, which use the same distribution of votes as the Portuguese proposal (Table 2, compare col. 1 with col. 6 and col. 2 with cols. 7 + 8).

Since the distribution of voting power in variants of the weighted dual majority is identical with variants that use only weighted votes, their equitability is also the same.

Table 2

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7 Results of the IGC – Treaty of Nice ⬆

During the ICG one of the main problems confronting the Member States in their search for a solution to voting rules in the Council was that the simple reweighting of votes – which most Member States considered the preferable solution –, if it followed the rule of closer relation to population size, had one unwanted consequence: the qualified majority of votes (at approximately the same threshold level) ceases at a certain point to represent the majority of Member States (Table 1, QM min states). Actually, only the extrapolation variant guarantees that the qualified majority of votes 'naturally' represents the majority of states too. As the possibility of a qualified majority being established by a minority of Member States was for most countries unacceptable, the criterion of the majority of Member States had to be brought in as an extra rule. Moreover, countries with large populations were not satisfied with the number of votes which the smaller countries were still willing to allot them (the redistribution of votes in weighting A resulted in a solution somewhere between the Portuguese and the Italian proposals – i.e. more than 'limited' but less than 'substantial'), so they demanded an 'escape clause', whereby, when doubting that the qualified majority of votes truly

represented a majority of the EU population, they could request verification. Thus emerged the third criterion for a threshold of 62 per cent, which is higher than the current level of approximately 58 per cent. The threshold for EU25 was settled by the Brussels European Council in October 2002 on 232 votes (72.27 per cent) (Table 1, col. 9; Table 2, cols. 9, 10).

The results of the distribution of voting power compared to the extrapolation variant bring more significant gains to Spain and Poland (+1.5 per cent). The other *big* states will gain 0.6 per cent. Germany, as the most populous Member State, will stay at the same position as the other *big* states (Table 2, col. 9). Smaller states with the exception of the Netherlands will in general lose: Latvia, Slovenia and Estonia will suffer a notable loss (–1.2 per cent), Malta somewhat less (–0.7 per cent), the others even less (–0.1 to –0.4 per cent).

As the application of the Treaty of Nice concerning decision-making in the Council may bring other different situations, these have to be considered. The first one is the procedure that the Treaty presents as 'standard'; i.e. the qualified majority will be established on the basis of voting (A) and on the basis of a majority of states (C), because the application of the population criterion is only discretionary.

What was said above about the variants of the weighted dual majority applies here too, only inversely. As the quota of weighted votes is considerably higher than the quota of population, with the given distribution of Member States – i.e. their votes and share of population –, the application of the population criterion makes no difference to the voting power of Member States (Table 2, cols. 9-10).

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Another situation that may arise is that the new rules will be applied to the EU15 in 2005, as no new members will have yet acceded to the EU by that date. In that case, if the three-criteria decision-making were applied, the *big* would gain from 0.8 to 0.9 per cent, with the exception of Spain, which would gain a significant 1.9 per cent compared with current situation of the EU15; all the others would lose between 0.3 and 0.7 per cent. In the event that the qualified majority is established solely on the basis of votes (A) and majority of states (C), the *big* with 29 votes would gain 0.1 per cent less, the effect for Spain would still be 1.9 per cent gain.

Compared to the other variants, the Nice solution in terms both of distance and the equitability may be seen as being quite close to the Portuguese proposal (Table 3, col. 2; Table 4, cols. 3 and 6). The most distant solution in both respects would be the simple dual majority.

Table 3 + Table 4

8 Conclusions

Assuming that the Banzhaf index is suitable method for measuring the *a priori* voting power of an actor within a decision-making body, we may draw the following conclusions:

1. The first significant conclusion is that the representatives of Member States might have spared themselves time and energy spent on deliberations about numerous variants of weighted dual majority solutions. Introducing additional weighted criterion of population to the existent criterion of weighted votes – already correlated to the size of population – simply makes no sense if the thresholds are set on markedly different levels. We may conclude from this analysis that when more criteria are applied, as they are in Nice rules, the most important

factor is the relative level of thresholds, since they are able to block the influence of other criteria in certain scenarios. For example: for the EU15 the criterion of the majority of states is irrelevant, because it is impossible to reach the QMV quota with a smaller number of states. The same is true for the EU27 (with the threshold according to the Declaration on enlargement) and sometimes it is presumed that it holds for any enlargement scenario (see e.g. Galloway, 2001, p. 81). But it is not the case for the EU25, nor is it for certain other enlargement scenarios. Similarly, the population criterion is relevant only under certain conditions. In variants where the QMV quota is set above 71 per cent and the level of population criterion is between 58 per cent and 62 per cent (all weighted dual majority variants + Nice), the influence of this criterion is either blocked totally or is negligible (Germany in EU15; Table 2, col. 11). The combination of three criteria with different thresholds (C > 50%, B = 62% and A = 71%) influences the position of individual Member States to various degrees under different scenarios of enlargement, so for their evaluation each conceivable composition of the EU should be analysed separately and general conclusions should not be made on the basis of a single enlargement scenario.

2. Implicitly, the solution from Nice has not made a noticeable difference in the position of Germany compared to the other *big* in the EU after enlargement. (For a different view, that Germany gets a substantially greater blocking power than the other large countries, see, e.g., Moberg, 2002, p. 275-6). Since the Banzhaf index does not distinguish between the power to initiate action and the power to prevent action (Felsenthal, Machover, 1998, p. 62), it may reasonably be concluded that the ability of Germany to block a decision was not enhanced by the new decision-making rule, unless we say that the Member States see the main purpose of the decision-making procedure in preventing proposals from being approved.

3. A comparison of the Nice rules with the extrapolation variant leads one to conclude that the IGC achieved some of its aims, but not all. The overall equitability of the solution is better. Populous Member States will increase their share of voting power by 0.8 to 1.4 per cent and the value of the equitability index may be considered pertinent in the case of Britain, France and Italy (0.97 to 0.99) (Table 4, col. 6). Concerning the other states of the EU25 the effects on them are uneven; still, Latvia, Slovenia, Germany, Slovakia, Denmark and Finland have the worst values of equitability index. It means that the majority of under-represented countries are Member States from the *minor* group and the degree of under-representation of Latvia and Slovenia is higher than it is in the case of Germany.

4. From the point of view of groups or individual Member States the evaluated variants represent different strategies with diverse effects on their voting power. The Nice rules may be seen as marked victory for Spain and Poland and to a lesser degree this solution favours also the other *big*. This group (without Spain and Poland) could have obtained comparable position by the Portuguese model. The Italian solution would be logically the most favourable for the *big* but actually unacceptable for all the others. The group of *medium* and *minor-medium* states is in a position that does not allow much fluctuation in voting power under different variants of solution; what they had got in Nice was close to the optimal variant – from their point of view – the extrapolation. The worst solution for them would have been the simple dual majority, as it would have been also for the *big* (including Spain and Poland). The simple dual majority variant would have favoured only the *minor* and *small* and Germany.

5. The Nice decision-making rule, as a whole does not provide for a stable and balanced distribution of power within an enlarging EU. Considering that at the moment there has been no definitive decision on the steps for enlargement, it is important to consider how enlargement will influence the position of each individual Member State and also how many countries, and which, will really join the EU before the next IGC and will take part in it. Although a comparison of the various enlargement scenarios was not the aim of this paper, it may still be stated that the specific composition of the EU when the next IGC begins may influence decisions on institutional issues, including the decision-making rules of the Council. If the participants of the next IGC are 25 Member States, as seems probable after recent decisions within the EU, it may be concluded that for several Member States the Nice rules are unsatisfactory. Denmark and Finland accompanied by Latvia, Slovenia, Slovakia and Estonia form a group of *minor* states which have a reason to look for a better solution as for them the

Nice rules were the worst (or next to worst) solution from all the variants. It may also be concluded that none of the evaluated variants provides a balanced solution that would at the same time meet the requirements presented by various Member States during the IGC (esp. QMV quota made up of majority of Member States). On the other hand, introducing the population criterion in a form of dual weighted majority (including the Nice triple majority) with the parameters presented to the IGC was an example of an incompetent activism which makes the decision-making more complicated but brings no real difference in voting power of individual Member States.

Enlargement to the east will be a momentous step in the development of the EU. A European Union of 25 or 27 members will never be the same as it is now. A sound, balanced institutional basis, complying with the basic formal criteria of democratic process, will be essential for its stability and good prospects, as there is no guarantee that the old, entrenched ways of behaviour of both the Member States and the institutions of the EU will continue to be effective. The Nice solution on voting in the Council is hardly optimal in this respect and should be reconsidered.

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Endnotes ⬆

(1) If the Accession Act with ten new Member States signed in Athens on 16 April 2003 is ratified as planned, the application of the new rules will be set on 1st November 2004, i.e. two month earlier.

(2) Results of the voting power (Table 2) and the equitability index (Table 4) were obtained using the computer program *Nexus VP* developed by Anatolij Plechanov, 2002.

(3) For population size of both the member states and the candidate states the latest figures presented to the IGC in September 2000 were used (CONFER4771/00).

(4) Allotting to each country a number of 'votes' equal to the percentage of total EU population rounded up to the nearest tenth of a percentage point and multiplied by ten (CONFER 4745/00).

(5) To avoid this, the formula would have to be modified: in the last step the figure would have to be multiplied by 100 and not by 10. The authors of this procedure very probably had in mind the political attractiveness of the solution rather than possible mathematical consequences of its application.

(6) Only in Table 4 may the values for EU15 and EU25 be compared, as the numbers express the relation between the voting power of the state and its population regardless of the size of the assembly; the ideal value of the equitability index is 1.

Table I

Variants of weighting of votes in the Council

state	population	0 15 NOW	1 EXT	2 LR PTG	3 GR SWE	4 SR ITA	5 SDM COM		6 WDM		7 LR 58		8 LR 60		9 NICE		
		A	A	A	A	A	C	B	A	B	A	B	A	B	A	C	B
D	82165	10	10	25	18	33	1	182	10	182	25	182	25	182	29	1	182
GB	59623	10	10	25	15	33	1	132	10	132	25	132	25	132	29	1	132
F	58747	10	10	25	15	33	1	130	10	130	25	130	25	130	29	1	130
I	57680	10	10	25	15	33	1	128	10	128	25	128	25	128	29	1	128
E	39442	8	8	21	13	26	1	87	8	87	21	87	21	87	27	1	87
PL	38654		8	21	12	26	1	86	8	86	21	86	21	86	27	1	86
NL	15864	5	5	10	8	10	1	35	5	35	10	35	10	35	13	1	35
GR	10546	5	5	10	6	10	1	23	5	23	10	23	10	23	12	1	23
CZ	10278		5	10	6	10	1	23	5	23	10	23	10	23	12	1	23
B	10239	5	5	10	6	10	1	23	5	23	10	23	10	23	12	1	23
HU	10043		5	10	6	10	1	22	5	22	10	22	10	22	12	1	22
P	9998	5	5	10	6	10	1	22	5	22	10	22	10	22	12	1	22
S	8861	4	4	8	6	8	1	20	4	20	8	20	8	20	10	1	20
AU	8092	4	4	8	6	8	1	18	4	18	8	18	8	18	10	1	18
SK	5393		3	6	5	6	1	12	3	12	6	12	6	12	7	1	12
DK	5330	3	3	6	5	6	1	12	3	12	6	12	6	12	7	1	12
FN	5171	3	3	6	5	6	1	11	3	11	6	11	6	11	7	1	11
IR	3775	3	3	6	4	6	1	8	3	8	6	8	6	8	7	1	8
LI	3701		3	6	4	6	1	8	3	8	6	8	6	8	7	1	8
LA	2439		3	6	3	3	1	5	3	5	6	5	6	5	4	1	5
SL	1988		3	6	3	3	1	4	3	4	6	4	6	4	4	1	4
ES	1439		3	6	2	3	1	3	3	3	6	3	6	3	4	1	3
CY	755		2	4	2	3	1	2	2	2	4	2	4	2	4	1	2
L	436	2	2	4	1	3	1	1	2	1	4	1	4	1	4	1	1
ML	380		2	4	1	3	1	1	2	1	4	1	4	1	3	1	1
total	451039	87	124	278	173	308	25	998	124	998	278	998	278	998	321	25	998
QM		62	88	200	123	219	13	501	88	580	200	580	200	600	232	13	620
BM		26	37	79	51	90	13	500	37	421	79	421	79	401	90	13	381
QM%		71,26	70,97	71,94	71,098	71,1	52	50,1	70,97	58	71,94	58	71,94	60	72,27	52	62
BM%		26,89	29,89	28,42	29,48	29,22	52	50	29,84	42,1	28,42	42,1	28,42	40,1	28,04	52	38,1
QM min states		8	13	12	12	10	13		13		11		11		12		
BM min states		3	4	4	4	3	4		4		3		3		3		
QM min popul. %		58,16	55,19	55,54	55,22	66,18	50,07		58		58		60		62		
BM min popul. %		12,38	10,59	12,62	12,62	17,21	10,59		10,59		10,59		10,59		10,59		

Notes – Tables 1 and 2

EXT	= extrapolation of current distribution of votes to 25 members
LR PTG	= limited reweighting (Portuguese proposal)
GR SWE	= general reweighting (Swedish proposal)
SR ITA	= substantial reweighting (Italian proposal)
SDM	= simple dual majority (Commission´s proposal)
WDM	= weighted dual majority
LR58	= limited reweighting with population net, 58% threshold
LR60	= limited reweighting with population net, 60% threshold
NICE	= Treaty of Nice, threshold according to Presidency Conclusions. Brussels European Council, 24 and 25 October 2002
NICE AC	= Treaty of Nice, only weightings A and C applied

Table II

Voting power (VP) – results of individual variants

state	0 15 NOW	1 EXT	2 LR PTG	3 GR SWE	4 SR ITA	5 SDM	6 WDM	7 LR58	8 LR60	9 NICE	10 NICE AC	11 NICE 15	12 NICE 15AC	13 EU15 equit share	14 EU25 equit share
D	0,112	0,076	0,084	0,095	0,103	0,102	0,076	0,084	0,084	0,086	0,086	0,121	0,119	0,1396	0,1037
GB	0,112	0,076	0,084	0,083	0,103	0,075	0,076	0,084	0,084	0,086	0,086	0,120	0,119	0,1189	0,0883
F	0,112	0,076	0,084	0,083	0,103	0,074	0,076	0,084	0,084	0,086	0,086	0,120	0,119	0,1181	0,0877
I	0,112	0,076	0,084	0,083	0,103	0,073	0,076	0,084	0,084	0,086	0,086	0,120	0,119	0,1170	0,0869
E	0,092	0,064	0,074	0,074	0,085	0,057	0,064	0,074	0,074	0,081	0,081	0,111	0,111	0,0967	0,0718
PL		0,064	0,074	0,069	0,085	0,056	0,064	0,074	0,074	0,081	0,081				0,0711
NL	0,059	0,041	0,038	0,048	0,034	0,037	0,041	0,038	0,038	0,042	0,042	0,055	0,055	0,0613	0,0456
GR	0,059	0,041	0,038	0,036	0,034	0,033	0,041	0,038	0,038	0,039	0,039	0,052	0,052	0,0500	0,0371
CZ		0,041	0,038	0,036	0,034	0,033	0,041	0,038	0,038	0,039	0,039				0,0367
B	0,059	0,041	0,038	0,036	0,034	0,033	0,041	0,038	0,038	0,039	0,039	0,052	0,052	0,0493	0,0366
HU		0,041	0,038	0,036	0,034	0,033	0,041	0,038	0,038	0,039	0,039				0,0363
P	0,059	0,041	0,038	0,036	0,034	0,033	0,041	0,038	0,038	0,039	0,039	0,052	0,052	0,0487	0,0362
S	0,048	0,034	0,031	0,036	0,027	0,032	0,034	0,031	0,031	0,033	0,033	0,043	0,043	0,0458	0,0341
AU	0,048	0,034	0,031	0,036	0,027	0,031	0,034	0,031	0,031	0,033	0,033	0,043	0,043	0,0438	0,0325
SK		0,025	0,023	0,030	0,021	0,029	0,025	0,023	0,023	0,023	0,023				0,0266
DK	0,036	0,025	0,023	0,030	0,021	0,029	0,025	0,023	0,023	0,023	0,023	0,031	0,031	0,0356	0,0264
FN	0,036	0,025	0,023	0,030	0,021	0,029	0,025	0,023	0,023	0,023	0,023	0,031	0,031	0,0350	0,0260
IR	0,036	0,025	0,023	0,024	0,021	0,028	0,025	0,023	0,023	0,023	0,023	0,031	0,031	0,0299	0,0223
LI		0,025	0,023	0,024	0,021	0,028	0,025	0,023	0,023	0,023	0,023				0,0220
LA		0,025	0,023	0,018	0,010	0,027	0,025	0,023	0,023	0,013	0,013				0,0179
SL		0,025	0,023	0,018	0,010	0,026	0,025	0,023	0,023	0,013	0,013				0,0161
ES		0,025	0,023	0,012	0,010	0,026	0,025	0,023	0,023	0,013	0,013				0,0137
CY		0,017	0,015	0,012	0,010	0,025	0,017	0,015	0,015	0,013	0,013				0,0099
L	0,023	0,017	0,015	0,006	0,010	0,025	0,017	0,015	0,015	0,013	0,013	0,020	0,020	0,0102	0,0076
ML		0,017	0,015	0,006	0,010	0,025	0,017	0,015	0,015	0,010	0,010				0,0071
EU15	1,003	0,692	0,708	0,736	0,760	0,691	0,692	0,708	0,708	0,732	0,732	1,002	0,997	0,9999	0,7428
EU25		0,997	1,003	0,997	1,005	0,999	0,997	1,003	1,003	0,999	0,999				1,0002

Notes to Table 2

VP_i	= $CNT_i / (SUM(CNT_i))$
VP_i	= voting power index value of an actor i
CNT_i	= number of swings of an actor i
equit share EU15, EU25	= equitable share of member state according to the square root of its population (SQRT (p_i)) / SUM (SQRT (p_i))

See also Notes to Table 1 above

Table III

Differences in voting power between individual variants and the Treaty of Nice

	1	2	3	4	5	6	7
cols. Tab. 2	1.-9.	2.-9.	3.-9.	4.-9.	5.-9.	6.-9.	7.-9.
	EXT	PTG	SWE	ITA	SDM	WDM	LR58
D	-0,010	-0,002	0,009	0,017	0,016	-0,010	-0,002
GB	-0,010	-0,002	-0,003	0,017	-0,011	-0,010	-0,002
F	-0,010	-0,002	-0,003	0,017	-0,012	-0,010	-0,002
I	-0,010	-0,002	-0,003	0,017	-0,013	-0,010	-0,002
E	-0,017	-0,007	-0,007	0,004	-0,024	-0,017	-0,007
PL	-0,017	-0,007	-0,012	0,004	-0,025	-0,017	-0,007
NL	-0,001	-0,004	0,006	-0,008	-0,005	-0,001	-0,004
GR	0,002	-0,001	-0,003	-0,005	-0,006	0,002	-0,001
CZ	0,002	-0,001	-0,003	-0,005	-0,006	0,002	-0,001
B	0,002	-0,001	-0,003	-0,005	-0,006	0,002	-0,001
HU	0,002	-0,001	-0,003	-0,005	-0,006	0,002	-0,001
P	0,002	-0,001	-0,003	-0,005	-0,006	0,002	-0,001
S	0,001	-0,002	0,003	-0,006	-0,001	0,001	-0,002
AU	0,001	-0,002	0,003	-0,006	-0,002	0,001	-0,002
SK	0,002	0,000	0,007	-0,002	0,006	0,002	0,000
DK	0,002	0,000	0,007	-0,002	0,006	0,002	0,000
FN	0,002	0,000	0,007	-0,002	0,006	0,002	0,000
IR	0,002	0,000	0,001	-0,002	0,005	0,002	0,000
LI	0,002	0,000	0,001	-0,002	0,005	0,002	0,000
LA	0,012	0,010	0,005	-0,003	0,014	0,012	0,010
SL	0,012	0,010	0,005	-0,003	0,013	0,012	0,010
ES	0,012	0,010	-0,001	-0,003	0,013	0,012	0,010
CY	0,004	0,002	-0,001	-0,003	0,012	0,004	0,002
L	0,004	0,002	-0,007	-0,003	0,012	0,004	0,002
ML	0,007	0,005	-0,004	0,000	0,015	0,007	0,005
dist	0,0392	0,0218	0,0258	0,0389	0,0575	0,0392	0,0218

Notes:

dist = distance between two variants expressed as an Euclidean distance (SQRT (SUM $(x_j - x_k)^2$))

Table IV

Comparison of variants according to equitability

state	population	1 equit SDM	2 equit EXT	3 equit PT	4 equit LR58	5 equit ITA	6 equit Nice	7 equit SWE	8 equit NOW	9 equit N15	10 equit N15AC
D	82165	0,984	0,733	0,810	0,810	0,993	0,829	0,916	0,802	0,867	0,852
GB	59623	0,849	0,860	0,951	0,951	1,166	0,974	0,940	0,942	1,009	1,001
F	58747	0,844	0,867	0,958	0,958	1,175	0,981	0,947	0,949	1,017	1,008
I	57680	0,840	0,875	0,967	0,967	1,186	0,990	0,955	0,958	1,026	1,017
E	39442	0,793	0,891	1,030	1,030	1,183	1,128	1,030	0,951	1,148	1,148
PL	38654	0,787	0,900	1,041	1,041	1,195	1,139	0,970			
NL	15864	0,812	0,900	0,834	0,834	0,746	0,922	1,054	0,962	0,897	0,897
GR	10546	0,888	1,104	1,023	1,023	0,915	1,050	0,969	1,180	1,040	1,040
CZ	10278	0,900	1,118	1,036	1,036	0,927	1,063	0,982			
B	10239	0,902	1,120	1,038	1,038	0,929	1,065	0,984	1,197	1,055	1,055
HU	10043	0,910	1,131	1,048	1,048	0,938	1,076	0,993			
P	9998	0,912	1,134	1,051	1,051	0,940	1,078	0,995	1,212	1,068	1,068
S	8861	0,940	0,999	0,910	0,910	0,793	0,969	1,057	1,047	0,938	0,938
AU	8092	0,953	1,045	0,953	0,953	0,830	1,014	1,106	1,096	0,981	0,981
SK	5393	1,092	0,941	0,866	0,866	0,791	0,866	1,129			
DK	5330	1,098	0,947	0,871	0,871	0,795	0,871	1,136	1,012	0,872	0,872
FN	5171	1,115	0,961	0,884	0,884	0,807	0,884	1,153	1,028	0,885	0,885
IR	3775	1,260	1,125	1,035	1,035	0,945	1,035	1,080	1,203	1,036	1,036
LI	3701	1,272	1,136	1,045	1,045	0,954	1,045	1,091			
LA	2439	1,511	1,399	1,287	1,287	0,560	0,728	1,008			
SL	1988	1,612	1,550	1,426	1,426	0,620	0,806	1,116			
ES	1439	1,895	1,822	1,676	1,676	0,729	0,947	0,875			
CY	755	2,515	1,710	1,509	1,509	1,006	1,308	1,207			
L	436	3,310	2,251	1,986	1,986	1,324	1,721	0,794	2,262	1,967	1,967
ML	380	3,545	2,411	2,127	2,127	1,418	1,418	0,851			
MIN d_i		-0,207	-0,267	-0,190	-0,190	-0,440	-0,272	-0,206	-0,198	-0,133	-0,148
MAX d_i		2,545	1,411	1,127	1,127	0,418	0,721	0,207	1,262	0,967	0,967
MAX $|d_i|$		2,545	1,411	1,127	1,127	0,440	0,721	0,207	1,262	0,967	0,967
STD		0,799	0,468	0,367	0,367	0,214	0,205	0,099	0,348	0,262	0,262

Notes:

equitability index x_i	$= VP_i / (SQRT (p_i)) / SUM (SQRT (p_i)))$
p	= population
d_i	= deviation from the mean value equal 1
MIN (d_i)	= minimal value of deviation (x_i-1)
MAX (d_i)	= maximal value of deviation (x_i-1)
MAX$(\lvert d_i \rvert)$	= maximal absolute value of deviation
STD	= standard deviation; measure of the dispersion of equitability index xi about the ideal value equal 1 $(SQRT (SUM (d_i^2)/n))$