

# Can expansion lead to a more efficient UN Security Council? A Veto

## Players Analysis\*

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### Abstract

The aim of this paper is to examine whether an expansion of UNSC would weaken its decision capacity. To do so, we applied veto players theory to the widely discussed expansion scenarios proposed by the *High Level Panel on Threats, Challenges and Change*. To locate the states on their decision space, we applied factor analysis on post-Cold War roll call votes in the UN General Assembly. We obtained that we live in a multi-dimensional international security world, where the first underlying factor is responsible for around 40% of the variance, far above the rest, and is strongly correlated with GDP per capita. Nevertheless, we conducted both one and multi-dimensional spatial analysis, to take into account the different and competing suggestions of the relevant literature. In all cases, we come to the conclusion that the proposed reform does not lead to a less efficient decision-making. The core of such an expanded UNSC is always smaller if not the same with the core of the current Council, due to the fact that most of the potential new members belong to the middle or upper level of economic development.

**Keywords:** UN Security Council; decision-making; reform; veto players

### Introduction

During the Cold War, the UN Security Council (UNSC) served as little more than a stage upon which the East and West enacted their ideological struggle. Rather than operating as a mechanism duty-bound under the UN Charter to exercise “the primary responsibility for the maintenance of international peace and security” on behalf of all UN members, the UNSC provided a security institution of little political significance. Under these circumstances, there was no reason for the UN members to call into question the structure of the UNSC, which remained unchanged since 1965.

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The end of the Cold War, however, with the attendant collapse of the communist rule in central and eastern Europe, opened up new prospects for a greater role of the UNSC in international affairs. Especially after the 1990-1 Gulf conflict, during which the UNSC stood center-stage, hopes were raised that the most important political body of the UN would become a prominent international security agency. All these developments, in conjunction with the growing stance of some states, most notably Germany and Japan and the dramatic increase in UN membership, led a large number of states to place their claims for reforming the UNSC in order to make it more representative. In this manner, states believe that the UNSC will become more legitimized and will improve the implementation degree of its decisions. However, there are counter arguments which have a significant influence on the ongoing debate, because they are very often expressed by key states, such as U.S, UK, France, and Russia.<sup>1</sup> They are based on the assumption that a potential enlargement of the UNSC or a more demanding decision rule will reduce the decision capacity of the body.

What has been the response of the literature to the demand for UNSC reform and especially to the question of expanding its membership? Most scholarly accounts recognize the need for a reform of the UNSC but share the same fear that a larger size would weaken the body's decision-making capacity and its ability to act swiftly and effectively. Fearon (2005, 11), for instance, argues that "increased legitimacy helps ...but the overall impact on effectiveness could actually be negative if increasing the size of the Council makes it harder to get good resolutions passed in the first place". Similar concerns, that "a Security Council of 21 or 25 members would hardly improve effectiveness" or that "the number of members must be kept small for the sake of efficient argument", have been expressed by Wallenstein (1997,106) Weiss (2003,149), Caron (1993,567) and others (for instance Blokker 2005, 253-6; Blum

2005, 632; Knight 2002, 33; Laurenti 1997, 11; Zacher 2003, 11; Reisman 1993, 96; Roberts and Kingsbury 1993, 40; see also various authors in the collective volume *Reforming the United Nations for Peace and Security* 2005). These reservations, that a UNSC expansion and its decision capacity will be negatively correlated, expressed among UN members, practitioners and IR analysts, motivated the research presented in this paper.

To dissect this puzzle we decided to work on the most popular and widely discussed expansion scenarios proposed by the *High Level Panel on Threats, Challenges and Change* appointed by the UN Secretary General. Central element in the decision structure of the UNSC is the veto power which either institutionally or positionally involved players hold. To address this issue in our analysis, we apply Tsebelis's veto player theory (Tsebelis 2002). The main analytical tool is the concept of *core*, or the set of points, which cannot be defeated by any other point. From the definition of core follows that the larger the core is, the less decision capacity there is in the system. Tsebelis (2002, 39-41) shows that the core expansion could be either caused because the majority rule becomes more demanding, starting from simple to qualified majority and unanimity, or because the veto players' ideal policy points are relocated in a greater distance from each other. The outcome of our analysis suggests that the core of UNSC will either shrink or remain the same if an expansion based on *High Level Panel's reform* proposals will be enacted.

The paper is organized in four parts. First, in order to carry out spatial analysis, we need to reveal the dimensionality of the decision space. To do so, we apply factor analysis on United Nations General Assembly (UNGA) roll call votes. Secondly, we apply veto players theory on a current UNSC and the alternative scenarios of its

expansion, working on one-dimensional space. In the third part, we repeat the same exercise for a two- or multi- dimensional decision space. Finally we conclude.

### **The Dimensionality of Countries' Voting Behavior**

To uncover the dimensionality of the voting behavior of member states in the UNSC, we conduct a factor analysis on the roll call voting in the UNGA. We do so because UNSC voting could not be considered sincere voting.<sup>2</sup> Before the actual vote, countries embark upon behind-the-scenes talks, until they determine that the adoption of a resolution is an output of increased probability. As a result, most of the time resolutions do not enter the formal voting stage at all, creating the false impression of *ex ante* voting preference convergence. On the contrary, voting in the UNGA constitutes a more representative sample of observations in order to map the underlying and often latent preferences of the states over international security issues. The substance of these preferences drives the states when they use strategic voting in the UNSC. A potential preference diversion reduces the possibility for the adoption of a resolution through strategic behavior, buying or selling votes in the UNSC.<sup>3</sup>

IR scholars working in the field have used votes to derive countries preferences. The question of dimensionality of the voting behavior in the UNGA appears to divide the relevant literature, especially after the end of the Cold War. To take two of the most influential quantitative analyses of roll call voting in the UNGA, the work of Kim and Russett (1996) and the analysis of Voeten (2000), we observe a cleavage both on the methodology between linear and non-linear parametric techniques and on the question of whether the voting behavior of states is multi-dimensional or one-dimensional.

Kim and Russett use factor analysis on roll call voting in the UNGA for the period immediately after the Cold War, from 1991 to 1993, and arrive at the conclusion that the voting space has three dimensions, which are issue sensitive and account for the 68% of the variance matrix. They found that the first dimension divides the countries along the issue of “self-determination and disarmament”, which includes the subissues of economic and social inequalities, apartheid and reduction of the excess military power of the northern states. The second is “the political rights” dimension, which clusters the countries according to their policy preference over violation of electoral rights and of human rights, such as torture and arbitrary arrest with regard to the Islamic countries of Iraq, Iran, and Sudan. The third underlying factor is “the Middle East” issue and reflects the position of the countries over the potential resolution of that crisis (Kim and Russett 1996, 632-7).

Voeten in turn, following the recently influential non-linear methodology of NOMINATE, developed for the study of the dimensionality of the voting behavior in the U.S. Congress by Pool and Rosenthal (1991), arrives at the opposite conclusion that voting space of UNGA is one-dimensional. He sees the world divided into two camps: the pro-hegemonic countries, mostly the U.S. and its western allies, and the anti-hegemonic countries, such as China. His data set includes observations from 1991 until 1996. However, NOMINATE has received criticism (i.e., Heckman and Snyder 1997): algorithm tends to underestimate the dimensionality of the voting behavior, resulting most of the time in the conclusion that the space under examination is one-dimensional. Actually, one dimension is the result Voeten obtains (2000, 196-7). He discovers that one dimension can explain 91,8% of the voting decisions of states.

It is not within the scope of the present paper to take part in this methodological debate. However, by choosing the NOMINATE algorithm as our analytical tool, it is

very probable that we will also end up working on a one-dimensional space. Our intention is to overcome these contradictory suggestions by testing the general validity of the outcome of our analysis on the efficiency of the UNSC in both one and multi-dimensional spaces, as well as for issue-specific and cross-issue voting. We can do so, because veto players' theoretical arguments hold for both one-dimensional and multi-dimensional decision spaces.

### *Data and Statistical Analysis*

In search of conclusions with general validity, we decide to run factor analysis ourselves on the most updated data set of voting observations, starting from the end of the Cold War in 1991 up to 2005. For this purpose, we use an updated version of the data set provided by Voeten<sup>4</sup> in order to obtain comparability in our results.

We also run factor analysis over the subset of international security related resolutions in the UNGA 1991-2005, so as to investigate whether the issue at stake differentiates the underlying factors affecting voting behavior. In this subset, we have included all UNGA resolutions concerning questions of international security, that have been brought before the General Assembly for deliberation, perceived in its broadest definition.<sup>5</sup> These resolutions mostly concern disputes, threats and breaches of peace, weapons, disarmament, terrorism, peacekeeping, humanitarian intervention, human and political rights violations. UNGA resolutions relating to the internal functioning of the UN (such as budgetary questions, approval of annual reports of various organs of the UN, election of members of the various organs, establishment of subsidiary bodies and working groups, etc.) are excluded from our sample.

In the first case, our sample contains all members of the UNGA (192 countries) and 1066 observations which correspond to resolutions voted in the period 10/1991-

10/2005. In the second case, our sample contains the states that served on the Security Council in the period 1946-2005 (115 states) and 737 international security related resolutions voted during the period 10/1991-10/2005. We decide to examine the voting attitude of this sample of 115 state-members of the UN, because, throughout the history of UNSC, these have been proved to be more active on international security and are more likely to be elected as new permanent or non-permanent members, in case of a UNSC expansion.<sup>6</sup>

The analysis is performed via the principal components method without factor rotation and the correlation matrix being positive semi-definite. From our results in tables 1, 2, it is evident that we obtain multi-dimensionality.

(Insert tables, 1, 2)

The post-Cold War UNGA decision space seems to be multi-dimensional. The first factor explains around 40% of the variance; 37.5% in the complete set and 40.5% in the international security related resolutions. The significance of the rest of the factors drops precipitously: the second factor explains 8.4% in the complete set of observations and 5.6% in the case of security related issues. Most of the remaining eight factors explain less than 3% of the voting variance each.

To interpret these results we focus on the persistent and most influential finding of the analysis, which is the first dimension of the voting behavior of the states. For a deeper analysis in the interpretation we should employ multivariate regression analysis and examine the significance of more than one and possibly competing variables. However, it is beyond the scope of this work to resolve the complexities of the causal chain of countries' voting over international security issues. Our analytical concern is to reveal an organizing principle of such voting behavior in order to map preferences of states and to apply veto players theory. To determine such an explanatory variable

we turn to the relevant empirical studies mentioned above on roll call voting in UNGA.

Kim and Russett argue that in the post - Cold War era voting alignments in the UN “are likely to be shaped by state preferences along developmental lines, and views of self-determination and economic development will reflect the continuing great differences between rich and poor nations” (1996, 651). With the emergence of “human security” dimension, most of these issues occupy a significant part of the international security agenda. Likewise, Voeten, despite the different methodology and outcome of his work, recognizes that the level of development of a state plays an important role in its voting alignment in UNGA. He points out that “the wealth and level of democracy of a country relate strongly to the extent that a country’s voting behavior corresponds to that of the West”. More specifically, he underlines that “wealth has a particularly strong effect on the position of countries along the human rights dimension [which is central to contemporary international security agenda], even stronger than democracy” (Voeten, 2000, 209).

Based on this consistent evidence produced in both studies, we hypothesize that the first factor of our analysis is strongly correlated with states’ average income level measured by GDP per capita. To test this hypothesis we employ a linear regression model linking the first factor loadings with the average logarithmic GDP per capita for the period we study<sup>7</sup> as follows:

$$\text{Factor 1 loadings} = \text{BAveLogGDP} + \text{Constant} + \varepsilon$$

The regression results reported in tables 3, 4 for both our data sets show a strong correlation between voting alignment and the level of development of countries.

(Insert tables 3, 4)



This result is in accord with IR theories from both realist and liberal camps which link the wealth of states and their economic interdependence with their preferences over war and international security.<sup>8</sup> This finding does not take us by surprise. It could be attributed to the formation of the contemporary international security agenda. Almost twenty years after the end of the Cold War international security issues which are closely related to citizens' concerns on global economic regulation – i.e., energy resources, environmental issues such as the overexploitation of common pool resources, and the functioning of capital and labor markets – are at the fore more than in any other historical turn. States with similar levels of development realize similar needs and develop convergent preferences over economic regulation. If we add to this part of the international security agenda the concerns of political liberalism over violations of human and political rights, which grow relatively with citizens' living standards, it is reasonable to expect states to converge on international security issues, in line with their level of development.

Since we obtain such an organizing principle for the space of the UNGA voting behavior - an influential first factor with significant correlation with GDP per capita of the voting states - we can project it on the functioning of the UNSC to apply veto players theory.

#### *Dimensions: Which and How Many Should be Used?*

The aforementioned factor analysis and regression result give us the convenience to start our analysis for the UNSC voting on one-dimensional space, along the level of development of the participant states. The level of development enables us to easily identify clusters of countries with similar voting behavior in the

proposed reform scenarios and to draw conclusions with regards to the voting capacity of a future enlarged UNSC. We then apply veto players analysis in two dimensions.

If the results of our one-dimensional analysis are proved robust in the two-dimensional space, our arguments gain even more in generality. This is because we know that the findings of one-dimensional spatial analysis are not automatically transposed to a multi-dimensional space. It is well known that a median voter always exists in a one-dimensional space. However, if more than one dimension is considered, a median voter rarely exists (actually the probability of the existence of such a voter is almost zero).<sup>9</sup> This restriction on generality does not apply to our two-dimensional representation. Therefore, the results of our analysis will not be dependent on the number of dimensions. At the same time, working in a two-dimensional space, we overcome the possibility of choosing the wrong answer for the dimensionality of the UNGA voting space. An almost “perfect” picture of the voting variance for countries across resolutions would be produced on a ten-dimensional space based on the entire set of the obtained factor loadings. However, in the picture produced, the order of countries’ location remains the same as in the first two-factor space.

In the two-dimensional analysis, in order to avoid any possible spuriousness in the correlation between the first factor scores and the GDP per capita of the states, we use directly the first factor loadings in order to map the voting behavior of states along the first dimension of our model. The second factor is introduced as the other dimension. We could pick as second dimension any of the remaining factors without changes in the outcomes of our spatial analysis, since their contribution to the variance of voting is very small, less than 3% each after the third factor. Let us now proceed to

the venture of locating countries and drawing cores on the decision space of a current as well as an expanded UNSC.

### **One-dimensional Spatial Analysis**

#### *The Composition of a Fifteen-Member UNSC*

We firstly classify a typical fifteen-member UNSC according to the members' level of development. We cluster them into three categories; developed, middle and developing. We start with the permanent members U.S., UK and France, which are categorized as developed, while Russia and marginally China are in the middle category. Following the regional distribution of non-permanent seats according to which the UNSC is formed, the African bloc holds three posts, the Latin American and Caribbean, the Asian, and the Western European and Others blocs elect two members each, and the Eastern European bloc elects one member. Based on the above distribution of non-permanent seats, we can safely assume that the two Western European members come from the developed economies. Also without risk, we can argue that the Eastern European non-permanent member and at least one of the Latin American and one of the Asian members belong to the middle development category. With the addition of China and Russia we obtain a total of five middle developed members. Thus the maximum number of members coming from the developing countries group is five. In this case the composition of the UNSC will be five developed, five middle and five developing members.

In the other extreme all members from the Americas and Asia and one from Africa will belong to the middle development level countries. In this case the composition will be two developing, eight middle and five developed members. Moreover, if one of the Asian members, as in the case of Japan, belongs to the group

of the developed economies, then the composition of the UNSC will be two developing, seven middle and six developed members.

Overall, we observe that, in the current composition, membership from the group of the developed economies varies between five and six members; we could have from five to eight middle development members, while developing members could vary from two to five. Therefore, along the dimension of GDP per capita, to the left of China - which is the lowest frontier of the unanimity core of the UNSC<sup>10</sup> - we could have the maximum five developing UNSC members plus any middle country with GDP per capita smaller than China's. Russia and the Eastern European member do not fall in this category. Only a country from Asia or Latin America could be less developed than China. In this case the maximum number of members that could be located to the left of China is seven. As we will show in the core analysis, in a fifteen-member UNSC if there are less than seven states to the left of China, the qualified majority core (9/15) is always absorbed by the unanimity core.

#### *The Composition of an Expanded Twenty-four-Member UNSC*

We conduct the same exercise of categorizing states for an expanded UNSC. As we have initially stated we are going to use as expansion scenarios the proposals made by the UN *High-Level Panel on Threats, Challenges and Change*.<sup>11</sup> These proposals offer two alternative models for expanding the Council. Model A provides for six new permanent seats without a veto and three new non-permanent seats, distributed among the major regions, bringing the total number of Council members to twenty-four. Model B, which would expand the Council by the same number of seats overall, creates no new permanent seats but rather a new category of eight four-year term seats

without a veto and one non-permanent seat (and non-renewable) within the Council, distributed among the major regions.

**Model A**

Regional areas	Number of states	Permanent seats (continuing)	Proposed new permanent seats	Proposed two-year seats (non-renewable)	Total
Africa	53	0	2	4	6
Asia and Pacific	56	1	2	3	6
Europe	47	3	1	2	6
Americas	35	1	1	4	6
Totals model A	191	5	6	13	24

**Model B**

Regional areas	Number of states	Permanent seats (continuing)	Proposed four-year renewable seats	Proposed two-year seats (non-renewable)	Total
Africa	53	0	2	4	6
Asia and Pacific	56	1	2	3	6
Europe	47	3	2	1	6
Americas	35	1	2	3	6
Totals model B	191	5	8	11	24

*Source:* A More Secured World: Our Shared Responsibility: Report of the Secretary-General's High-Level Panel on Threats, Challenges and Change (2004, 81).

By repeating the categorization exercise for the case of expansion with model A, we obtain at least six developed members. Half of them include the old permanent members UK, U.S. and France, plus the proposed new permanent member from Europe, possibly Germany, one from Asia, since Japan is the “front runner”, and one non-permanent member from Western Europe. In the middle development category, we will have at least eleven members. This is because it is reasonable to suppose that the proposed new permanent member from Americas, possibly Brazil, and the three non-permanent members from this bloc belong to the middle development level. This also applies to the non-permanent Eastern European member and at least to three out

of the five new members from Asia, and to one from Africa. It is more realistic to assume that one of the six African members will belong to the middle level of development, especially if South Africa or Egypt becomes a permanent member. We add these countries to the old permanent members, Russia and China and we obtain eleven states of middle development in the expanded UNSC.

The maximum number of states in the developing cluster is to consist of seven countries along with five African countries, plus one member from Asia and one from Americas. In this case we expect a maximum number of nine countries, including the seven members of the current body plus the two new members from the developing group, to the left of China. As we will see in the section of core analysis of a twenty-four- member UNSC if the number of members to the left of China is at most nine, the qualified majority core will be absorbed by the unanimity core.

Following the same reasoning, the prediction remains the same for the case of model B. The only difference with model A is that this reform scenario proposes eight four-year renewable seats, instead of six new permanent members. With model A, we speculate that Japan and Germany will join as part of the bloc of developed countries, Brazil will join as part of the middle level countries and only the two African members plus India could come from the developing countries bloc. The level of certainty is reduced in model B, due to the proposal for voting every four years for eight posts. This makes scenario B more volatile and results in a more risky prediction for the exact number of members in each of the three categories of economic development.

Based on the above analysis of the composition of UNSC, we come to draw and compare the core in both the current and the expanded version.

### *The Core of a Fifteen-Member UNSC*

In the current structure of the UNSC, for a decision to be validated, it is required not only to reach a qualified majority, around 60% (9/15), but also that none of the permanent members will use its veto to block the decision. In other words, a decision at the UNSC can be reached when two conditions occur simultaneously: 1) qualified majority with a threshold at 60% and 2) no use of veto by any of the current five permanent members (U.S., U.K., France, China and Russia).

In the language of veto players theory, these decision conditions convey that the core of the decision system of the UNSC is the convexification of two cores: one is “the unanimity core” defined by the five permanent members with veto power; and the other is “the 60% qualified majority core” of the whole UNSC. If the status quo (SQ) is laid within the five permanent members unanimity core, no draft resolution can be adopted by the UNSC, since it will be vetoed as less preferred by at least one of the permanent members. If the SQ lies outside the five permanent members unanimity core and within the “60% qualified majority” core of the fifteen members of the UNSC, it cannot again be defeated by any other draft resolution since it will not be supported by at least 9/15 votes. If the SQ lies outside both cores, but within the area contained by the borderlines that connect the extreme points of the unanimity and the 9/15 core, it cannot again be defeated. Actually, if the draft resolution is closer to one of the two cores, then it will be vetoed by the members of the other core since the draft proposal moves things away from their ideal policy preferences. Let us show the previous picture for a hypothetical fifteen-member UNSC in a one-dimensional space.

(Insert figure 1)

The q-core (9/15) is the intersection of all the sets of nine votes out of the fifteen states. In figure 1, the bounds of this set is the 9<sup>th</sup> state starting from the 1<sup>st</sup> state, the

US in the figure, and also the 9<sup>th</sup> state departing from the other end of the spectrum where the 15<sup>th</sup> state is located. The unanimity core is at the part of the spectrum where the five permanent states are located. So as not to lose in generalization, we locate all the non-permanent ten members in such a way that the 9/15 core does not intersect with the 5/5 core. Then, the core of the UNSC is the convexification of the two cores, which includes the two cores plus the area between the two cores. If the SQ lies in one of these two cores, it cannot be defeated by any other point. The same if the SQ is located in the area between the two cores. Then, any proposal to move it in one or the other direction will be vetoed by the member states that are located in the opposite direction and prefer the SQ. In the case where the two cores intersect then the total core is the union of the 5/5 and 9/15 cores.

In the fifteen-member UNSC, if seven non-permanent members, which is the maximum number of states according to our aforementioned analysis, lie to the left of China, the total core is the union of the two cores, as we observe in the figure below.

(Insert figure 2)

In all other cases, since we obtain less than seven countries to the left of China, the 9/15 core is absorbed by the unanimity core of the permanent members and the non-decision area of the current UNSC is defined between China and the United States. We proceed to apply the same analysis to an expanded UNSC.

#### *The Core of a Twenty-four UNSC*

We use a twenty-four UNSC which is composed in accordance to model A. With regard to the decision rule both proposed models of expansion do not specify whether the required qualified majority will remain at the same percentage 9/15, as in the current UNSC. For our analysis, we try to maintain the same percentage of 60%



which is equivalent to a required majority of 15/24 (62.5%) or 14/24 (58.3%). However, the choice of the exact decision rule influences the decision capacity of the body. The qualified majority core is going to be larger if the 15/24 rule is adopted. In this case, with the exception of a particular location of the veto players, the decision capacity of the expanded UNSC will be reduced.<sup>12</sup> For the needs of our comparative study we work with both decision rules, the 14/24 and the 15/24.

According to the categorization of the potential participant countries we described above, we expect at least one new member in the developed bloc, six new members in the middle level bloc and a maximum of two new members from the developing countries. To the left of China we could have a maximum of nine members. We add these nine new members in bold on the line of the fifteen-member UNSC presented in figure 2 to produce figure 3.

(Insert figure 3)

Following the above presented algorithm for the calculation of the core of the reformed body, since nine is the maximum number of members that could be located to the left of China, we obtain that the qualified majority core will be absorbed by the unanimity core with both of the decision rules, namely 14/24 and 15/24. We conclude that the expanded UNSC, based on model A, will have as total core the unanimity core.

In comparison with the core of a fifteen-member body with seven members to the left of China, the core of the expanded UNSC is reduced to the unanimity core and its decision capacity is increased. If there are less than seven states to the left of China in a fifteen-member UNSC, its 9/15 core is already absorbed by the unanimity core, and therefore, with the expansion to twenty-four members, its decision capacity remains unchanged. In other words, the prediction is that it will be easier if not the

same for the reformed body to adopt its resolutions. We can argue that this happens due to the considerable increase of the middle level countries and that all new members from the developing block could be cancelled out by new members from the developed world, which lie to the right of China. Let us now turn to test our one-dimensional findings on a two-dimensional space.

### **Two-Dimensional Spatial Analysis**

#### *The Fifteen-Member UNSC on Two Dimensions with Preference Mapping based on International Security Issues Voted in the UNGA*

We work on a two-dimensional space by using as the first and second dimension, the first and second factor loadings respectively, of the analysis on international security related roll call voting.<sup>13</sup> We recall that, we chose these 115 states of the UNGA to run factor analysis, because we assume that this list of the most active states on international security issues within the UN contains the member candidates for an expanded future UNSC. We should also keep in mind that the choice of any of the other underlying factors, as a second dimension, would not change the relative distance of the states on the map.

Insert figure 4

In figure 4, we select the fifteen points, which correspond to the members of the UNSC composition in the year 2005, which is the last year we have observations for the voting behavior of the states. Members include the U.S (permanent), Brazil, Argentina, China (permanent), Japan, Philippines, Tanzania, Benin, Algeria, UK (permanent), France (permanent), Russia (permanent), Denmark, Greece and Romania. We mark differently the permanent and the renewable members of the UNSC in order to distinguish them in our analysis. The polygon defined by China,

Russia, U.S and France also includes the UK and therefore constitutes the unanimity 5/5 core of the permanent members.

We can further divide the fifteen members several times by choosing nine out of fifteen points and creating 9/15 majorities. The lines, such as the one drawn through the points of Argentina and the U.S., which leave nine points on the one side of them, including Argentina and the U.S., are called “9/15 qualified majority dividers” (q-dividers) (Tsebelis 2002, 52). We draw all the possible q-dividers creating each time an enneagon. Anywhere, within each polygon, the correspondent veto players cannot unanimously (9/9) agree to change the SQ if the last is located within the enneagon. This polygon constitutes the unanimity core of the nine selected players. If we now select all possible polygons, their intersection constitutes the area within which no point can be defeated by any 9/15 majority. This intersection is the hatched small polygon contained by the lines France-Tanzania, Benin-Japan, Argentina-Russia, and Argentina – U.S in figure 4 and represents the “9/15 qualified majority core” of the 15 player decision-making body.

The total core of the decision body is the convexification of the unanimity 5/5 core and the 9/15 qualified majority cores. We observe in figure 4, the fifteen-member total core is the 5/5 core, the 9/15 core plus the area contained between the dashed lines connecting the ideal point of Argentina, the most distant end of the polygon 9/15 core with China and France, which constitutes the area between the two cores.

At this point, it is worth noting that on the basis of Greenberg’s theorem<sup>14</sup>, “the 9/15 qualified majority core” does not always exist in a two-dimensional policy space, since  $9/15 < 2/(2+1)$ . If the preferences of the fifteen members of the decision body are homogeneous enough, the “9/15 qualified majority core” may shrink and disappear. In this case, the total core of the fifteen-member UNSC is its unanimity core.

We can take our analysis further and examine the decision capacity of a proposed twenty-four member body after adopting the more demanding decision rule 15/24. If the core of the new expanded body does not grow, despite the increased difficulty to obtain a 62.5% instead of a 60% majority, we can assume that with a 14/24 (58%) in the decision rule the core of the same body will shrink.

*The Twenty-four Member UNSC on Two Dimensions with Preference Mapping based on International Security Issues Voted in the UNGA*

We add nine more members to the plot of fifteen members and we thus draw the twenty-four member core (see figure 4, where the new added members are marked with the triangle sign). However, model A requires that we have simultaneously a new permanent and overall six members from Europe. To comply with this requirement we take Denmark out of the current composition of the UNSC and we add Germany, as the most likely to take the post of the permanent member. Following the categorization that we developed in the one-dimensional analysis and selecting the countries that have mostly served the UNSC, we obtain the following twenty-four members:

Americas: U.S (permanent), Brazil (permanent), Argentina, Panama, Colombia and Canada

Asia: China (permanent), Japan (permanent), India (permanent), Philippines, Republic of Korea and Australia

Africa: South Africa (permanent), Egypt (permanent), Zambia, Tanzania, Benin and Algeria

Europe: UK (permanent), France (permanent), Russia (permanent), Germany (permanent), Greece and Romania

The result we obtain by drawing the q-lines for the 15/24 core is a pentagon contained by the q-lines Argentina - India, South Africa (SAF) - U.S., Zambia – Korea (ROK), Egypt - Romania (RUM), Argentina - U.S. slightly larger than the qualified majority core of the fifteen-member UNSC (figure 4) but partially absorbed by the 5/5 core. Following the same algorithm as with the fifteen-member body in our plot, we obtain the total core of the twenty-four member UNSC as the convexification of the unanimity core and the qualified majority core. In figure 4, this is the area defined by the 5/5 core plus the shaded spot contained by the lines connecting the more distant end of the pentagon, which represents the 15/24 core, with China and France.

What we obtain, by comparing the two cores, is that the twenty-four member total core is contained within the fifteen member core (figure 4). With the addition of nine new members, the core of the expanded body shrinks by the non-shaded area within the dashed lines in figure 4, despite the fact that we have used a more demanding qualified majority of 62.5% in our analysis. As we can see in our plot, the majority of new members are located in the middle area of the fifteen member plot, which makes the new body converges across the dimension of factor one. The result is in accord with the one-dimensional analysis.

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Finally, we are going to check the robustness of the results of our two-dimensional analysis against a new data set containing 1066 observations on the total roll call votes in the post-Cold War UNGA. If we show that the shrinkage of the decision core of a twenty-four member UNSC is also observed by using the complete

set of roll call votes, then our evidence gains in generality and holds regardless of the data we used to map the voting behavior of the member states.

(Insert figure 5)

We use the same method to draw the fifteen member and the expanded twenty-four member cores of the Security Council. The only difference with figure 4 is that we use the factor loadings<sup>15</sup> obtained by the analysis of the complete data set of roll call votes. In figure 5, we obtain the 9/15 core contained by the q-lines Benin-Japan, Tanzania (Taz)-Denmark, UK-China. This is a very tiny triangle located to the south of lines China-Russia-France that constitutes the north bound of the 5/5 unanimity core.

The 15/24 core is contained by the q-lines Panama-Korea, Algeria-France, Egypt-Germany, Zambia-Korea, Australia-Russia, Colombia-Russia, which is a hexagon of a larger size than the 9/15 core. However, looking at figure 5 we observe that the 15/24 core is also entirely located to the south of the China, Russia, France line, which is the northern borderline of the 5/5 core and, therefore, absorbed by the unanimity core. We attribute this is to the fact that most of the potential new members will be located in the middle range of the first dimension. This finding corroborates the result of the analysis of votes on the international security related resolutions. Hence, the proposed by the *High Level Panel* expansion of the current UNSC will not produce a body with reduced decision capacity. Our prediction is that it will remain the same, defined by the size of the unanimity core.

The above-presented evidence has shown that the same conclusions hold for both one- and two-dimensional analysis. Moreover, if there is a third dimension, the most probable is that there will be no qualified majority core (Tsebelis 2002, 150) and the only core will be the unanimity one, with no difference between the expanded and

the reduced case. The implication of this result is that the decision capacity of the expanded UNSC will remain the same, contained by the requirement of unanimity amongst the five permanent members. Consequently, we demonstrated that decision efficiency does not decline due to the likelihood of expansion, regardless of the number of dimensions.

## **Conclusions**

Our discussion may be summarized as follows. The aim of this study was to examine whether an expansion of the UNSC would weaken its decision capacity. To do so we applied veto players theory to the widely discussed expansion scenarios proposed by the *High Level Panel on Threats, Challenges and Change*. We employed statistical analysis on the voting behavior of the UNGA member countries to determine the dimensionality of its decision space. We conducted factor analysis on both a data set with roll call votes in the UNGA on all issues as well as on international security issues after the end of the Cold War, starting from 1992 up to the end of 2005. In both cases, multi-dimensionality was the result, with the first factor being responsible for around 40% of the variance far above the rest of the factors.

Regression analysis has shown that this first factor is correlated with GDP per capita. The implied theoretical element of this finding is that voting behavior of countries is very much influenced by the level of their economic growth.

In turn, comparing the size of the core of a representative fifteen-member UNSC and an expanded one, according to the proposed reform scenarios, in both one and multi-dimensional spaces, we obtained that in all cases the core of an expanded body will be reduced if not remain the same.

In this way, it has been shown that it is misleading to connect expansion with less decision capacity in the UNSC. IR scholars, who argue that it is better not to increase the number of the members of the UNSC, make the same mistake as those scholars of comparative politics. They express the view that potential veto points of a political system coincide with the actual number of veto players. They pay attention only to the institutions of a political system, while omitting that the system consists of players who have preferences over policy outputs that might be convergent. Hence, when we study the decision capacity of international organizations we have to take into account not only the decision rule and the number of involved veto players but also their policy preference.

Finally, we emphasize our intention not to embark upon a normative discussion for the future of the UNSC. On the contrary, we tried to confine ourselves to a positive discussion, in agreement with those who believe that the fruitful way to do social science is not to mix the two cognitive worlds. However, we share the opinion that positive evidence may help normative discussion to link feasible goals with efficient means. From such a normative perspective, our study suggests that if policy-makers' goal is to expand the UNSC, in order to make it more representative, they could proceed without losing in efficiency. On the contrary, efficiency in UNSC decision-making may be improved since the vast majority of new member states will belong to countries of middle or higher level of development.



## Notes

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<sup>1</sup> For the views of these states see, for instance, *Report of the Secretary-General*, UN Doc.UN A/48/264 and Add.1, Add.2; see also statement on UNSC reform made by Bill Richardson, Permanent Representative of the United States to the UN, in the Open-Ended Working Group on Council Reform, 17 July 1997; also Statement to the General Assembly by Sergey Lavrov, cited in UN Doc.GAOR/A/53/PV.63, 19 November 1998, p. 23. Lavrov explicitly warned that an expansion of the UNSC could impair its efficiency and turn the body into a "discussion club".

<sup>2</sup> Similar arguments are developed in Voeten (2000).

<sup>3</sup> Similarly Kim and Russett (1996, 649) suggest that “these voting patterns in the UNGA help to illuminate the influence on state alignment in other UN bodies, most notably in the UNSC”. They argue that in both bodies “issues do substantively and ideologically overlap.”

<sup>4</sup> See data sets in Voeten “Documenting Votes in the UN General Assembly V2.0 (1946-2005)”. <http://www.columbia.edu/~eg589/index.htm>. (Accessed February 10, 2007).

<sup>5</sup> Our definition of international security incorporates concerns rising from the recently emerged attempt within the UN to transform international security into a more inclusive policy concept of “human security”; see in *A More Secured World: Our Shared Responsibility* (2004).

<sup>6</sup> We make this assumption, because these states, except for the permanent members, were elected by the UNGA upon the recommendation of the UNSC, to serve as non-permanent members of UNSC, on the basis of two criteria: "their contribution to the maintenance of international peace and security" and the "equitable geographical

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distribution". These are the selection criteria proposed by the *High-Level Panel* for future UNSC membership.

<sup>7</sup> The data for GDP per capita is derived from the WDI of the World Bank.

<sup>8</sup> For a review of these arguments see amongst others the works of Gatzke (2007), also Voeten (2000); and O'Neil and Russett (1997).

<sup>9</sup> For example, see Riker (1982).

<sup>10</sup> See figure 1.

<sup>11</sup> See *A More Secured World: Our Shared Responsibility* (2004).

<sup>12</sup> The *High Level Panel on Threats, Challenges and Change* seems to have paid more attention to the representativeness of the new UNSC. It proposes an equal number of members from each of the four voting groups, by dividing the number of members by four. However, if the target is, as the *Panel* declares, to maintain or at least not to reduce the decision capacity of the body, it could propose a twenty-five member body with 15/25 required majority as part of the decision rule.

<sup>13</sup> See table I in appendix.

<sup>14</sup> According to Greenberg (1979), a core always exists if  $q < n/(n+1)$  where  $q$  is the decision rule and  $n$  the dimensionality of the policy space.

<sup>15</sup> See table II in appendix.

## References

- Blokker, Niels. 2005. Towards a Second Enlargement of the Security Council? A Comparative Perspective. In *The Security Council and the Use of Force. Theory and Reality. A Need for Change?*, ed. Niels Blokker and Nico Schrijver, 253-260. Leiden: Martinus Nijhoff Publishers.
- Blum, Yehuda. 2005. Proposals for UN Security Council Reform, *American Journal of International Law* 99(3): 632-49.
- Caron, David. 1993. The Legitimacy of the Collective Authority of the Security Council, *American Journal of International Law* 87(4): 552-88.
- Fearon, James. 2005. Comments on the Report of the High-Level Panel on Threats, Challenges, and Change. In *Reforming the United Nations for Peace and Security: Proceedings of a Workshop to Analyze the Report of the High-Level Panel on Threats, Challenges, and Change*, ed. Ernesto Zedillo, 89-98. Yale Center for the Study of Globalization New Haven, March.
- Gartzke, Erik. 2007. The Capitalist Peace, *American Journal of Political Science* 51(1): 166-191
- Greenberg, Joseph. 1979. Consistent Majority Rule over Compact Sets of Alternatives, *Econometrica* 47(3): 627-36.
- Heckman, James and Snyder, James. 1997. Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating the Preferences of Legislators, *RAND Journal* 28(0): 142-89.
- Kim, Soo Yeon and Russett, Bruce. 1996. The New Politics of Voting Alignments in the United Nations General Assembly, *International Organization* 50(4): 629-52.

Knight, Andy 2002. The Future of the Security Council: Questions of Legitimacy and Representation in Multilateral Governance. In *Enhancing Global Governance*, ed. Cooper, Andrew, English, John and Thakur, Ramesh, 19-37. New York: United Nations University Press.

Laurenti, Jeffrey. 1997. Reforming the Security Council: What American Interests?, UNA-USA Occasional Paper Series, New York, United Nations Association of the United States.

O'Neal, John and Russett, Bruce 1997. The Classical Liberals Were Right: Democracy, Interdependence, and Conflict: 1958-85. *International Studies Quarterly* 41, (2): 267-293

Pool, Keith and Rosenthal, Howard. 1991. Patterns of Congressional Voting. *American Journal of Political Science* 35(1): 228-78.

Reisman, Michael. 1993. The Constitutional Crisis in the United Nations, *American Journal of International Law* 87(1): 83-100.

Riker, William 1982. *Liberalism Against Populism*, San Francisco: W.H.Freeman

Roberts, Adam and Kingsbury, Benedict. 1993. The UN's Roles in International Society since 1945, ed. Adam Roberts and Benedict Kingsbury, 1-62. Oxford: Clarendon Press.

A More Secured World: Our Shared Responsibility. Report of the High-Level Panel on Threats, Challenges and Change. 2004. New York, United Nations.

Strand, Jonathan, Rapkin, David and Scales, Patrick. 2005. Weighted Voting, Relative Voting Power, and UN Security Council Reform. Paper presented at the annual meeting of the International Studies Association, March, Honolulu.

Tsebelis, George 2002. *Veto Players: How Political Institutions Work*, Princeton: Princeton University Press.

- Voeten, Erik. 2000. Clashes in the Assembly, *International Organization* 54(2): 185–215.
- Wallensteen, Peter. 1997. Representing the World: A Security Council for the 21<sup>st</sup> Century. In *The Politics of Global Governance*, ed. Robert Dahl, 103-15. Boulder: Lynne Rienner.
- Weiss, Thomas. 2003. The Illusion of UN Security Council Reform, *The Washington Quarterly* 26(4): 147-61.
- Zacher, Mark. 2003. The Conundrums of Power Sharing: The Politics of Security Council Reform. Paper prepared for the Conference on the United Nations and Global Security, University of British Columbia, 18-19 September. <http://www.cir.ubc.ca/unconf/zacher.pdf>. (Accessed February 20, 2007).

**Table 1**

**Factor analysis of all issues (roll call votes) for 192 countries of the UNGA for the period 3/10/91-31/10/05**

<b>Total Variance Explained</b>			
Factors	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	399.777	37.503	37.503
2	87.522	8.210	45.713
3	50.661	4.752	50.465
4	36.872	3.459	53.924
5	28.092	2.635	56.559
6	23.360	2.191	58.751
7	20.142	1.889	60.640
8	18.954	1.778	62.418
9	17.890	1.678	64.097
10	16.471	1.545	65.642
Number of Observations		1066	

Extraction Method: Principal Component Analysis.

**Table 2**

**Factor analysis of international security issues (roll call votes) for 115 countries who served the UNSC for the period 3/10/91-31/10/05**

Factors	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	298.646	40.522	40.522
2	41.463	5.626	46.148
3	37.083	5.032	51.179
4	33.908	4.601	55.780
5	24.721	3.354	59.135
6	23.413	3.177	62.312
7	18.276	2.480	64.791
8	18.192	2.468	67.260
9	14.761	2.003	69.263
10	14.400	1.954	71.216
Number of Observations 737			

Extraction Method: Principal Component Analysis.

**Table 3**

**Regression between the first factor and the average logarithmic GDP per capita for 192 countries of the UNGA for the period 3/10/91-31/10/05 (data source WDI, World Bank)**

**Coefficients (a)**

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.952	0.332	2.868	0.005
AveLogDGP	-0.138	0.044	-3.160	0.002
R	0.238 (b)			
R Squared	0.056			
Adjusted R Squared	0.051			
Std. Error of the Estimate	0.87443816			
Number of Observations	1066			

a. Dependent Variable: REGR factor score 1 for analysis 1

b. Predictors: (Constant), AveLogDGP



**Table 4**

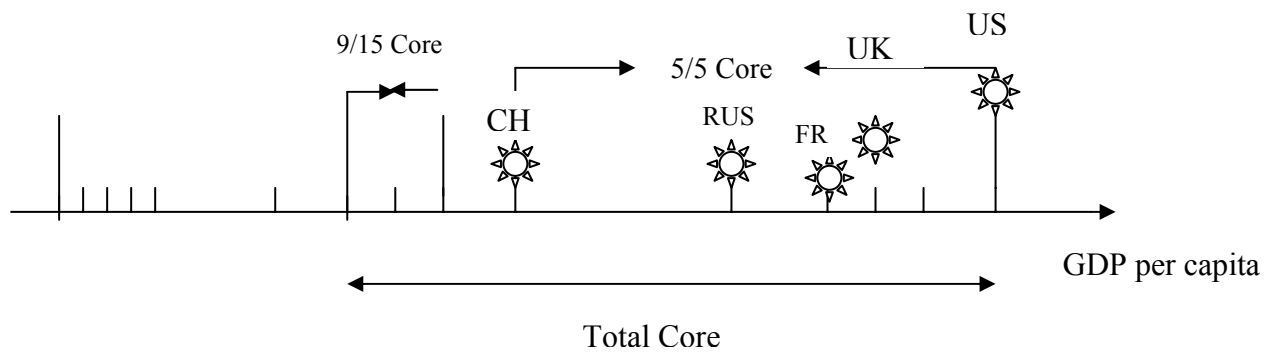
**Regression between the first factor and the average logarithmic GDP per capita for 115 countries of the UNGA for the period 3/10/91-31/10/05 (data source WDI, World Bank)**


**Coefficients (a)**

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.064	0.337	3.160	0.002
AveLogDGP	-0.153	0.043	-3.525	0.001
R	0.324 (b)			
R Squared	0.105			
Adjusted R Squared	0.096			
Std. Error of the Estimate	0.71986919			
Number of Observations	736			

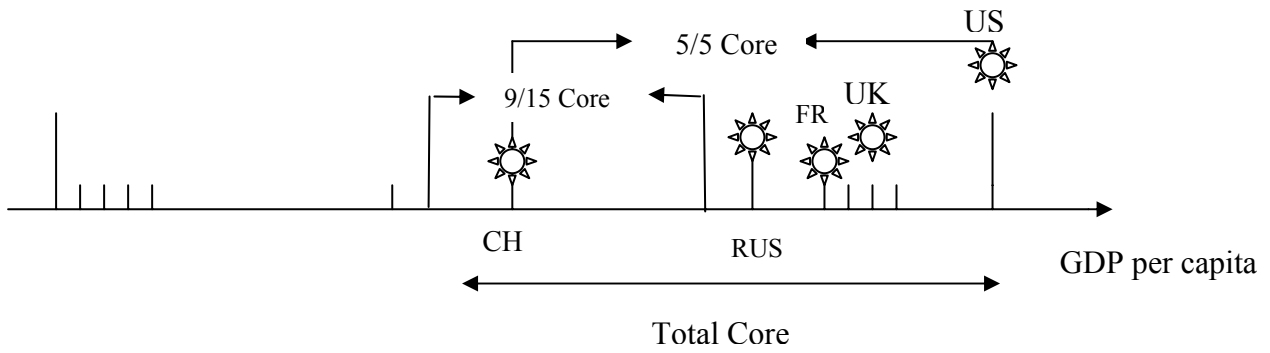
- a. Dependent Variable: REGR factor score 1 for analysis 2
- b. Predictors: (Constant), AveLogDGP


**Figure 1**  
**The core of a hypothetical 15 member UNSC**



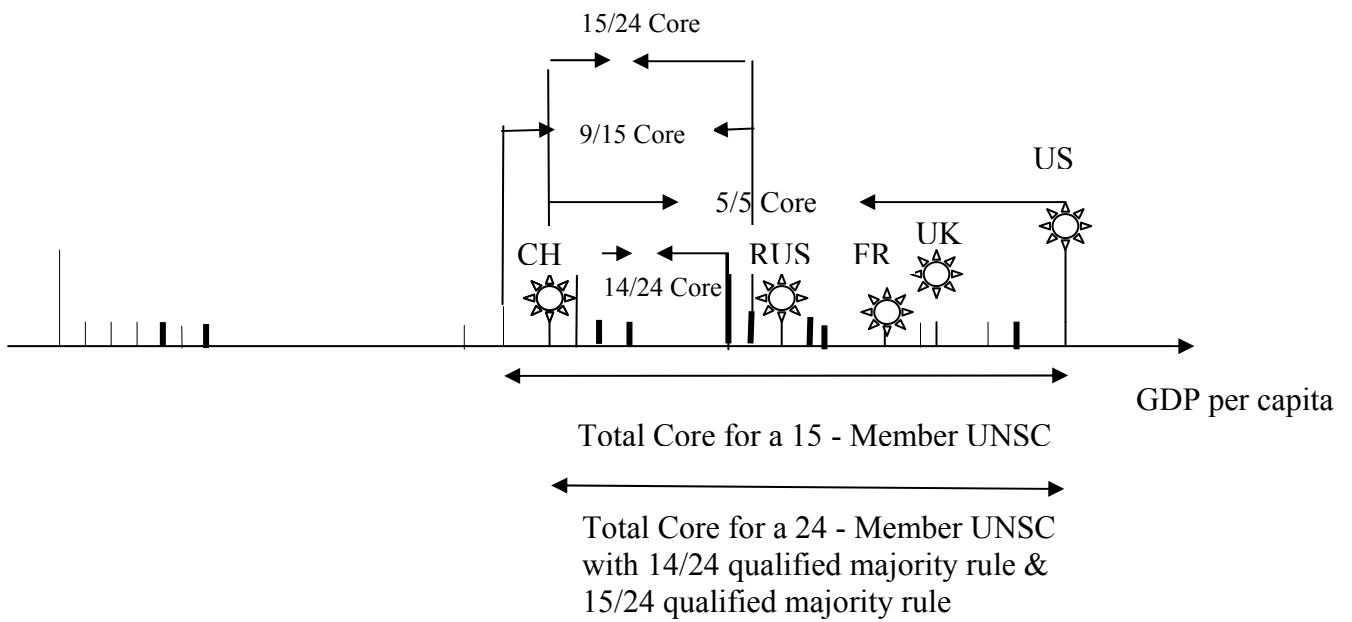
<u>MEMBERS</u>	
	Permanent
	Non-permanent elected


**Figure 2**  
**The core of a 15 member UNSC**



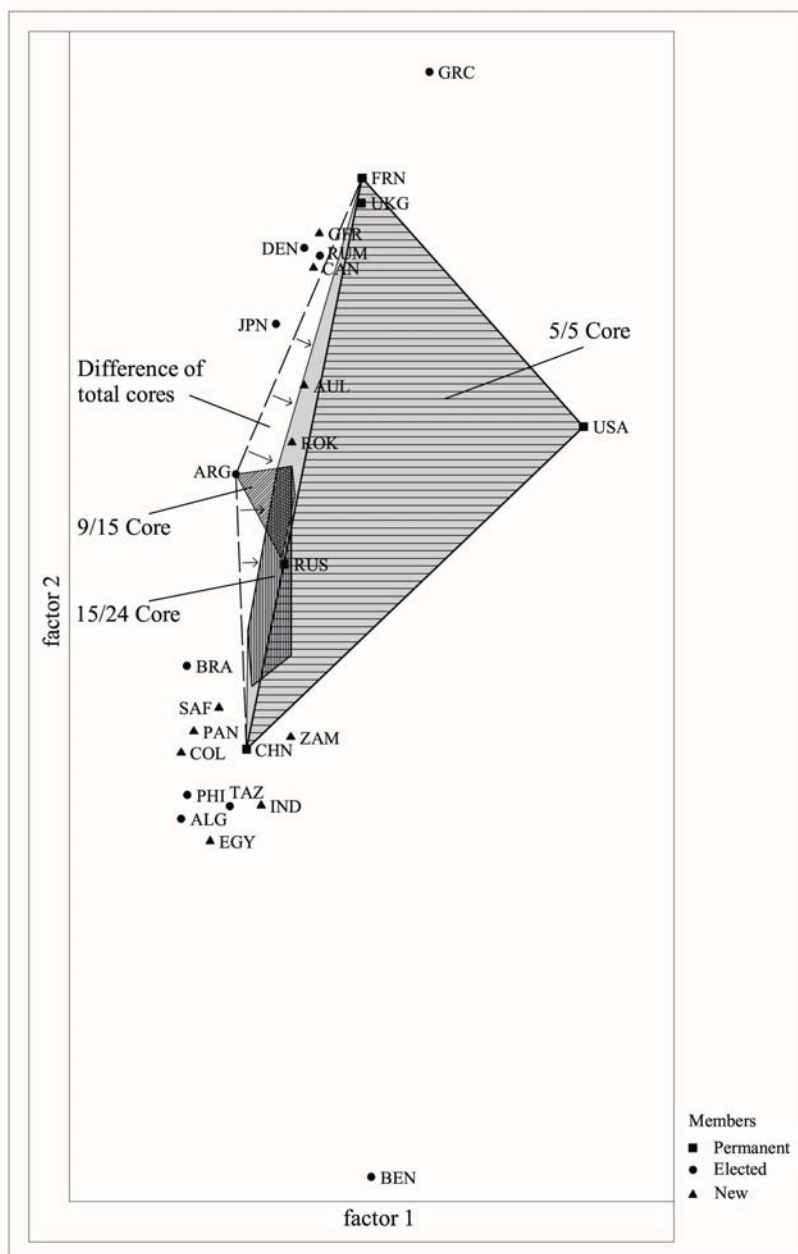
<u>MEMBERS</u>	
	Permanent
	Non-permanent elected

**Figure 3**  
**UNSC 15 & 24 - Member Cores Compared in One-dimensional Space**

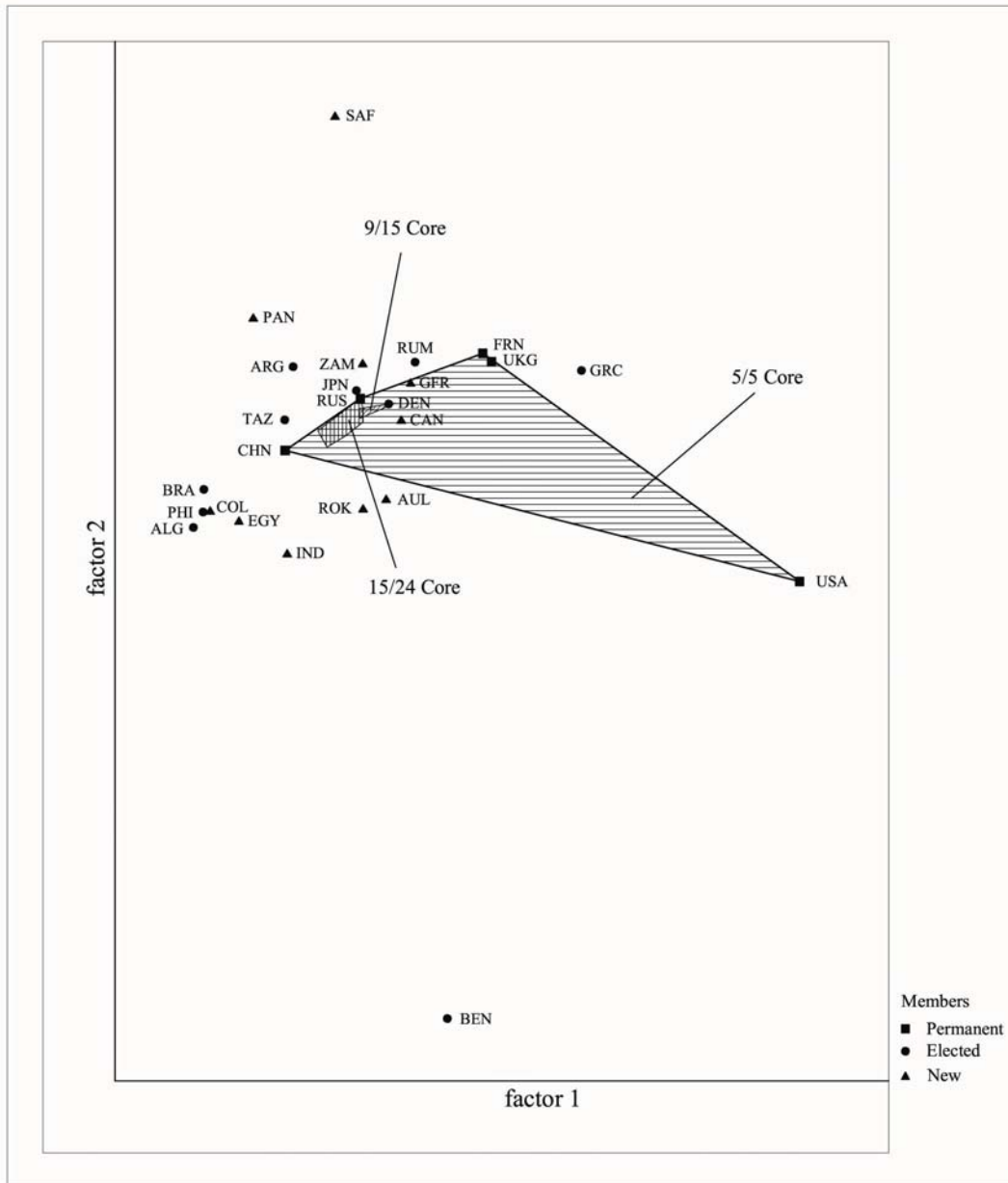


MEMBERS	
	Permanent
	Non-permanent elected
█	New added

**Figure 4**  
**UNSC 15 & 24 - Member Cores Compared in a Two-Dimensional Space with Preference Mapping Based on International Security Issues Voted in the UNGA**



**Figure 5**  
**UNSC 15 & 24 - Member Cores Compared in a Two-Dimensional Space with Preference Mapping Based on All Issues Voted in the UNGA**



## Appendix

**Table I**

**The factor loadings of the members of the UNSC used in figure 3. Factor analysis of international security issues for 115 countries for the period 3/10/91-31/10/05 (737 observations on the roll call votes)**

<b>Countries</b>	<b>Factor 1 Loadings</b>	<b>Factor 2 Loadings</b>
USA	0,44874	0,66315
UKG	-0,10008	1,216
FRN	-0,09876	1,278
RUS	-0,29046	0,3233
CHN	-0,38401	-0,13474
BRA	-0,53133	0,07217
ARG	-0,41041	0,54602
JPN	-0,31093	0,91706
PHI	-0,53031	-0,24766
TAZ	-0,42581	-0,2748
BEN	-0,07559	-1,19228
ALG	-0,54557	-0,30642
GRC	0,0678	1,54102
RUM	-0,20296	1,08577
PAN	-0,51433	-0,09084
COL	-0,54534	-0,14295
CAN	-0,21849	1,05584
IND	-0,34811	-0,2736
PAK	-0,45348	-0,46163
INS	-0,50418	-0,3772
SAF	-0,45236	-0,03197
EGY	-0,47418	-0,3617
NIG	-0,44072	-0,31781
GFR	-0,20435	1,14094
DEN	-0,24097	1,10496

**Table II**

The factor loadings of the members of the UNSC used in figure 4. Factor analysis of all issues for 192 countries for the period 3/10/91-31/10/05 (1066 observations on the total roll call votes)

<b>Countries</b>	<b>Factor 1 Loadings</b>	<b>Factor 2 Loadings</b>
USA	0,07681	-0,23836
UKG	-0,35069	0,06723
FRN	-0,36279	0,07886
RUS	-0,53264	-0,01594
CHN	-0,63691	-0,05598
BRA	-0,74957	-0,11039
ARG	-0,6258	0,06034
JPN	-0,5382	0,02722
PHI	-0,751	-0,1419
TAZ	-0,63766	-0,0136
BEN	-0,41189	-0,84551
ALG	-0,76443	-0,16304
GRC	-0,22618	0,05495
RUM	-0,45698	0,06661
PAN	-0,68137	0,12709
COL	-0,741	-0,14137
CAN	-0,47592	-0,01513
IND	-0,63413	-0,20034
PAK	-0,7001	-0,2719
INS	-0,72404	-0,17056
SAF	-0,56792	0,40713
EGY	-0,70117	-0,15517
NIG	-0,66978	-0,10131
GFR	-0,46294	0,03657
DEN	-0,4935	0,00833