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Enhanced Cooperation in an Enlarged EU

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Abstract:
The paper adresses the need for more flexibility in the integration process of the European Union after its recent eastward enlargement. Due to the increasing number of decision-makers and the increasing heterogeneity of economic structures, financial constraints, societal preferences, and political interests, European integration based on the uniformity principle is hardly feasible. In order to avoid a rank growth of integration and yet to strengthen the momentum of flexibility, so-called enhanced cooperation appears to be an appropriate instrument to be applied to the overall integration process. In this context the paper analyzes different possible developments of selected common policies in the EU if enhanced cooperation is practised by a sub-group of EU-members. Based on cluster analysis similarities and distinctions among the EU members with respect to some specific policy realms are elaborated to identify clusters, or clubs, of countries which may apply the instrument of enhanced cooperation in the specific policy fields.

JEL-classification: E 61, F15, F42

Key words: European integration, enhanced cooperation, cluster analysis

1. Introduction

The most recent enlargement of the European Union (EU), which now consists of 25 member states, has brought the European integration process into a new phase of development. Objectives as well as institutional guidelines, designed for the original community of six, closely related neighbours and similarly developed economies, lose (at least partially) their relevance in a Union of 25 and more increasingly heterogeneous members. It becomes more and more difficult to agree on common decisions. This, in turn, imposes limits on the process of further deepening European integration, even if some member countries tend to favour an even closer political collaboration. Thus in the future, various kinds of common policies ranging from agricultural to social to environmental or to employment policies may not reflect preferences of each single member state in the way they did before. Whereas some countries in an increasingly heterogeneous Union hope to benefit from a further harmonization of specific policy realms others still do not. The French and Dutch 'No' in the referenda on the European Constitution have revealed clear limits of the integration process.

Based on club-theoretical considerations[1], the EU can be conceived as a provider of a club good, which is exclusively available to its members and the costs of which have to be borne by its members as well. The optimal club size results from the utility and the costs of one additional member (Padoan, 1997). This implies that there is a trade off between the optimal degree of provision of the club good, which here reflects the degree of integration intensity of the Union, and the size of the club (Ahrens/Hoen/Ohr, 2005). Hence, deepening integration and enlarging the EU involve a conflict of economic interests and political objectives. Moreover, the EU does not only provide one, but several distinct club goods such as the Common Market, the common currency, the common agricultural policy and the common foreign and security policy. In each policy realm, different country groupings may exist, which prefer a closer or a weaker integration than others.

Actually, the EU has reacted to these developments by introducing the instrument of so-called closer (or enhanced) cooperation. Enhanced cooperation enables the most ambitious member states to deepen cooperation between themselves while leaving the door open to other countries to join them at a later stage. The instrument was first introduced in the Treaty of Amsterdam in 1997, its importance strengthened in the Treaty of Nice in 2000, and its reach would be further broadened through the European Constitution or any other revision of the existing treaties.[2] The option of an enhanced cooperation of a subgroup of the entire Union facilitates progress in integration, even if not all member countries are willing or able to participate yet. A successful performance of such 'clubs in the club' may and shall motivate other member countries to participate in the enhanced cooperation efforts at a later stage.

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[1] Based on Buchanan's (1965) seminal paper on club theory, see particularly Sandler/Tschirhart, (1997) for an exhaustive survey of theoretical developments and actual applications of club theory since 1965.
[2] The provisions relating to enhanced cooperation are to be found in articles 43 - 45 of the EU Treaty.

By using cluster analysis, this paper focuses on several distinct policy realms as examples in order to mark-off country groups with relatively homogenous preferences. In a second step, we seek to elaborate which countries could be possibly interested in promoting closer cooperation within the EU and which policy objectives would be suitable to be pursued in such a framework. It will be shown that, contingent on the policy realm, different clubs of countries may be able and willing to promote European integration.

2. Conditions of enhanced cooperation according to the EU Treaty

Today's European Union of 25 (and soon 27) member countries can hardly follow the model of integration in which the Community evolves only in a consensual way and in its entirety from one stage of integration to another. Such a development model does not fit reality anymore. A differentiated participation of marked-off subgroups of the EU in further deepening processes of the Union should not be comprehended as a transitory phenomenon, but rather as a structural attribute of future European integration. The Schengen Agreement and the European Monetary Union represent already existing examples showing the character of a role model and the appeal to attract other countries to an enhanced cooperation within the EU.

However, closed cooperation cannot be practiced in any desired way. According to the EU Treaty (articles 43–45), it is subject to strict provisions: enhanced cooperation is only allowed, if it will

- aim to further the objectives of the Union and protect and serve its interests;

- respect the principles of the Treaties and the single institutional framework of the Union;

- be used only as a last resort;

- concern at least a third of Member States (at present 9);

- not affect the *acquis communautaire* or the measures adopted under the other provisions of the Treaties;

- not affect the competences, rights, obligations and interests of those Member States which do not participate in it;

- be open to all Member States and allow them to become parties to the cooperation at any time, provided that they comply with the basic decisions taken within the framework.

Even if these are numerous and vague rules, they represent at least a legal provision, which has been crafted to introduce closer cooperation in form of 'clubs within the club' and hence to unfold a deepening potential in (and despite) a growing Community.

3. Application of Cluster Analysis

3.1 Methodological Procedure

In order to address the question relating to the opportunities of an enhanced cooperation (in the sense of an ongoing deepening), we need to identify, first of all, country groups, for which − due to the relatively pronounced homogeneity of their political attributes and interests − enhanced cooperation appears to be a rational and viable policy choice.[3] Further, we apply cluster analysis as a toolbox to group EU member states according to the criterion of homogeneity of their political interests. This statistical method serves to identify 'natural' groupings of objects (in this case: member states).

The grouping of countries into entities which show similar characteristics takes place pairwise through a simultaneous comparison of distinct indicators. Hence, all countries[4] are compared bilaterally on the basis of the parameter value of several indicators (Aldenderfer/Blashfield, 1989, p. 7). As a measurement of the differences between states, we use the Euclidean distance, which specifies the sum of all measured differences between any two countries for all distinct indicators. For the measurement, we choose indicators which allow for conclusions with respect to the political and societal preferences of member states. This way, the extent of the political homogeneity between countries or country groupings can be identified (Everitt, 1993, p. 17). Regarding the subject of our analysis, the 'closer cooperation', the process of grouping countries needs to be continued until a country grouping will have emerged which includes at least nine states (i.e., at least a third of current EU members). Therefore, we proceed specifically as follows:

1. collecting the observations of all indicators x_k for all individual objects i (EU member states);

2. standardization of observations to assume values between 0 (lowest measured observations of an indicator x_k) and 1 (highest measured observations of an indicator x_k), in order to attach equal weights to all indicators; and

3. calculating the Euclidean distances between all pairs of countries by using the following formula[5]:

$$ d_{ij} = \sqrt{\sum_{k=1}^{p} (x_{ik} - x_{jk})^2} $$

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[3] The specific procedure and quantitative outcomes of the underlying cluster analysis, which brings about the subsequent country groupings in this paper, are available from the authors upon request.

[4] Even Bulgaria and Romania are already considered to be member countries in this context.

[5] Squaring number is necessary, so that positive and negative differences of observations do not compensate each other. This way, a matrix is derived which includes all bilateral political differences (in the form of Euclidean distances) between all EU member states. Given 27 member states (i.e., accounting for the foreseeable accession of Romania and Bulgaria), this implies 27 * 26 * 0,5 = 351 numbers).

with d_{ij} = Euclidean distance between country i and country j

x_{ik} = (standardized) observation of indicator k for country i

x_{jk} = (standardized) observation of indicator k for country j

p = number of indicators;

4. merging those objects (countries) i, which show the smallest Euclidean distance and which, hence, enjoy the most pronounced homogeneity of political interests;

5. the country grouping (cluster), that we find as a result, is to be conceived as a new entity, and the Euclidean distances of the cluster to the remaining countries are to be calculated anew;

6. steps 4 and 5 are to be repeated, until all countries will be assigned to one cluster – under the side condition that at least one of the groups needs to comprise at least nine members.

Thus this procedure allows to identify homogenous country groupings. In order to do so, specific indicators regarding different EU policy realms are determined which allow to draw conclusions with respect to political interests of member states. Hence, we assume that enhanced cooperation will be particularly promoted by those member countries which show a relatively high homogeneity of their political interests. Thus, similarly to modern club theory (Ahrens/Hoen/Ohr, 2005), we assume that the net utility of enhanced cooperation will be the higher the more similar the political interests of participating countries.

Using the introduced taxonomy, we proceed by identifying country preferences in a first step (here we focus on the European environmental policy, the European social policy, and the Common Agricultural Policy (CAP)). In a second step, country groupings with relatively homogenous preferences will be determined. In this context, all countries in all mentioned policy realms will be classified politically, too, according to the observations (as long as this is possible). Through a comparison of the observations of individual member states, this can be achieved relatively easily; and it is even facilitated through the mentioned standardization of values on a scale between 0 and 1. As a consequence, it is not only possible to group member countries into homogenous groups, but also to draw specific conclusions regarding the political preferences of individual groups and group members, respectively.

The three policy realms, which are explicitly addressed in this paper, can be roughly classified according to the following characteristics[6]:

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[6] A precise explanation of the used indicators will be given, when we analyze the individual policy realms.

Policy realm	number of indicators	classification of objects according to:
Environmental policy	32	environmental situation and political importance of environmental protection
Social policy	13	types of social security systems; high vs. low social standards
Common Agricultural Policy	38	preferences for landscape conservation, importance of the agricultural sector and benefits from the CAP; indicators regarding the structure of production

In order to answer the question regarding the opportunities of closer cooperation, we rely on those country groupings which emerged from the cluster analysis (Zeddies 2004, pp. 13). In all three policy realms, the cluster analysis produces three relatively large country groupings, the composition of which, however, differs from one policy realm to another. In what follows, we assume that particularly the advanced Western European countries will be prepared to use the instrument of closer cooperation in order to foster the deepening process, because it is these countries which essentially belonged to the founding members of the European Communities and still belong to a so-called 'Core Europe'. Since specific groups consisting of at least nine Western European countries actually emerge, these countries will be considered a starting-point in a specific policy realm. Therefore, we analyze their internal homogeneity and stability as well as their heterogeneity vis-à-vis other countries and country groupings. In this context, we will also address the question which other countries may be suitable to participate in a specific project of closer cooperation in the longer run.

3.2 Methodological peculiarities of the subsequent analysis

Before we discuss the empirical results for the three policy realms, a peculiarity in applying this empirical method to our research question should be briefly mentioned. In the cluster analysis, the different member states are merged into groups according to the specification of their political preferences. In the end, each country will be assigned to that group, to the members of which it appears to be politically most similar on average. However, the internal homogeneity of single country groupings cannot be recognized at first sight in a cluster analysis. Although each country is assigned to that country grouping, to which it appears to be *relatively* similar, i.e., more similar than with regard to the remaining country groupings, this does not allow precise conclusions with respect to the actual (*absolute*) political similarities or differences between the countries within a distinct group. This fact, however, can be crucial for our research question: If a country grouping proves to be internally relatively heterogeneous, closer cooperation would prove to be more difficult than for the members of a

relatively homogenous country grouping, which do not only show *relatively*, but also *absolutely* similar preferences.

From these considerations, we can conclude that enhanced cooperation in the sense of fostering the deepening process will not necessarily prove rational between members of a specific cluster only. If a distinct country grouping, in which several members as driving forces pursue closer cooperation (a so-called core group), is relatively heterogeneous, it can turn out to be advantageous to disregard deviatonists in one's own group. Instead it could prove to make more sense to convince individual members of other country groupings to join an effort of closer cooperation, if the (*absolute*) political differences towards those countries are smaller than towards the deviationists of the own group. Such an outcome is by no means contradictory to the results of the cluster analysis, as long as the predestined members of other country groupings are even more similar with respect to the wooing members of the core group than to the remaining members of their own group.

Due to the fact that the wooed countries show an even greater homogeneity within their own group than vis-à-vis the wooing countries of the core group (a compelling consequence of the cluster analysis), closer cooperation with the members of their own group would be more rational for them than cooperation with those wooing countries, which promote integration in the core group. Consequently, recruiting these countries to a closer cooperation would be presumably relatively expensive for the countries of the core group, i.e., associated with large political or financial concessions.

3.3 Graphical presentation

The empirical results are presented in a way which portrays the average distance of each individual EU member state vis-à-vis the members of its own group (which emerges from cluster analysis) as well as the distance to the members of that group which will most likely pursue a strategy of enhanced cooperation (i.e., the *core group*). Although we identify *ex ante* that country grouping which most likely will pursue enhanced cooperation in the sense of fostering deepening (the core group), theoretically even the other country groupings could practice closer cooperation, if they comprise at least nine members. For those countries, which do not belong to the core group, an alternative would exist, i.e., to participate in an effort of closer cooperation with the members of their own group, which, however, would differ considerably as regards contents and strategy compared to the approach to closer cooperation of the core group. But the more relevant alternative for members of more peripheral groups is the maintenance of the status quo, i.e., the objective not to pursue any further deepening activities for the time being.

The members of the core group, however, may have an interest to initiate enhanced cooperation with countries of the politically closest neighbouring group. Whether or not this

alternative proves to be a viable policy choice for the members of the core group, depends on the internal homogeneity of the core group on the one hand, and on their similarity to the members of the closest neighbouring group, on the other hand. Moreover, the larger the distance of a core country from the members of its own group and the closer it is to the closest alternative country grouping (i.e., the more homogenous it is vis-à-vis the members of the alternative group), the less attractive this country becomes as a partner for closer cooperation with the (remaining) members of the core group.

Figure 1 demonstrates in a general manner how the *absolute* as well as the *relative* similarities of each individual country, with which a closer cooperation could appear to be rational, can be portrayed. On the abscissa, we find the distance (measured in Euclidean distances) of each individual country i to the members of the core group (if the respective country belongs to the core group, the distance to the remaining members of the core group). On the ordinate, we depict the distance of each country i to the members of the (with respect to political preferences) closest neighbouring group (for countries, which do not belong to the core group, it is the distance to the remaining members of that country grouping to which they had been assigned in the cluster analysis).

Figure 1

Closer cooperation in policy realm XY
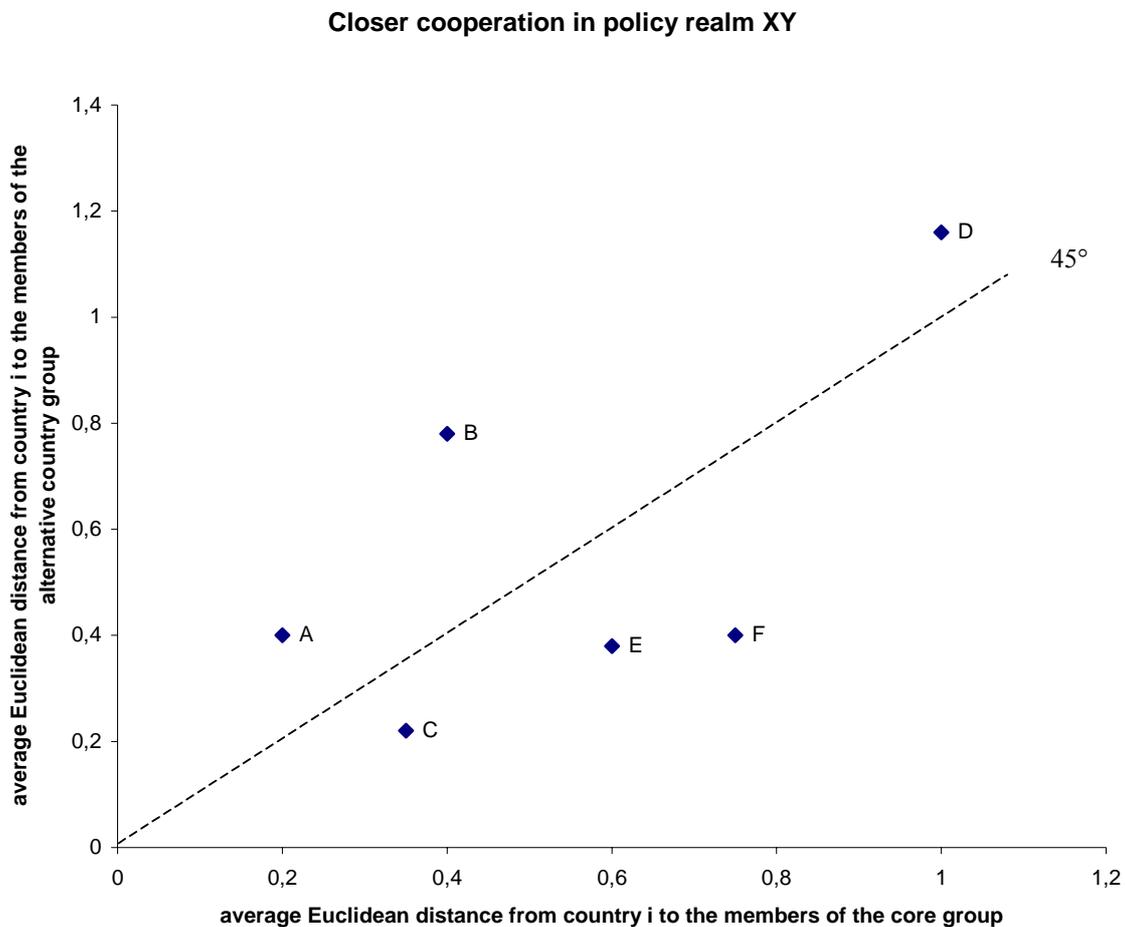
Based on Figure 1, we can derive the following conclusions: On the one hand, the willingness of a country to opt in favour of closer cooperation is less pronounced the greater the distance of the country's location from the origin of the coordinate system. In this case, a country would be relatively far away with respect to its political interests from the core group as well as from the respective alternative group (the absolute political differences would be large; see, e.g., country D). On the other hand, countries, located close to the origin, would be relatively similar to the core group as well as to the respective alternative country grouping, and hence an enhanced cooperation would be associated with low harmonization costs only (see, e.g., countries A and C). In that case, political agreements could be achieved without major problems; the *absolute* political differences would be small.

With which group a closer cooperation will be rational depends on the positioning of a country along the 45-degree-line: Countries, located above this line, are politically more similar to the core group than to the closest neighbouring group (see, e.g., countries A, B, and D). Countries, located below this line, are less homogenous with the core group than with an alternative country grouping (see, e.g., countries C, E, and F). The further a country is located above the bisector of the angle, the more strongly it is embodied in the core group, because the political closeness to the members of the core group is much greater than to the members of the alternative group. The further a country is located below the bisector of the angle, the more strongly it is embodied in the alternative country grouping. In sum: members of the core group are located above, and members of other groups are located below the 45-degree-line.

If we assume that closer cooperation would require a minimum of three countries in our example in Figure 1, different opportunities for cooperation would be conceivable: On the one hand, countries A, B, and D, all of which belong to the core group, could pursue closer cooperation. This would be supported by the fact that each of these three countries is more similar to the other two in the core group than to the members of the alternative group (here consisting of the countries C, E, and F). However, country D, although being more similar to the other members of the core group (A and B) than to the members of the alternative group (C, E, and F), is politically relatively far away from A and B, so that an enhanced cooperation between A, B, and D would presumably entail relatively high harmonization costs. On the other hand, for countries A and B there would be an option to convince country C to participate in closer cooperation, because C is more similar to A and B than D. Of course, it is questionable in how far this would be desirable from the standpoint of country C. This country is relatively homogenous with A and B, but even more similar to countries E and F, so that closer cooperation with E and F would be even more attractive for C than with A and B. Recruiting country C by A and B would certainly imply relatively severe political or financial concessions.

4. Presentation of the empirical findings

Using the instruments and procedures introduced above, we now explicitly investigate the options of applying enhanced cooperation in the realms of European environmental policy, European social policy, and the Common Agricultural Policy.

4.1 European Environmental Policy

During the past 30 years, a pronounced and relatively comprehensive set of rules and policies has emerged in the EU in the environmental realm, which will be developed further in the future especially with respect to climate protection, the conservation of biodiversity, and the protection of natural resources. From an individual country's perspective, positive external effects of environment-friendly measures, saving potentials for producers through European-wide common environmental standards, or the reduction of competitive disadvantages in those countries which already have relatively high standards imply the main argument favoring more intense, coordinated action in this policy field (Jeppesen, 2003, pp. 3).

For countries with comparatively low environmental standards, however, international harmonization of standards could impair location factors of production. For those countries, a rational strategy for environmental policymaking would rather favour to refrain from one's own efforts to promote environmental protection and to maximize their own utility by exploiting the positive external effects of efforts aiming at better environmental protection in other countries (Péchaux/Pouyet, 2003, pp. 33).

Regarding the clustering of the EU member states with respect to their preferences in environmental policymaking, we distinguish three different groups of indicators: state indicators, which depict national states of the environment; response indicators, which reflect the change of environmental states during the period 1995 – 2000, and policy-response indicators, which depict national measures in environmental policymaking aiming at improving environmental conditions (see Table 1). This way, we account for national preferences of environmental policymaking in a complex manner.

Table 1: Indicators of Environmental Policy (relating to the year 2002)[7]		
State Indicators	**Response Indicators**	**Policy-Response Indicators**

– agricultural land (in % of land area)
 	
 – fertilizer consumption (100grams/ha arable land)
 	
 – national protected areas (in % of total land area)
 	
 – energy efficiency (GDP per unit of energy use)
 	
 – consumption of fossil fuels (in % of total energy consumption)
 	
 – share of electricity generated by coal
 	
 – CO_2-equivalent emissions in % of GDP (kg/US$ GDP)
 	
 – threatened species as a share of total known species
 	
 – energy depletion in % of GDP
 	
 – suspended particulates in largest city (Microgram/m^3)
 	
 – fresh water consumption per capita (m^3)
	– fertilizer consumption (change 1995-2000 in %)
	
	 – CO_2-equivalent emissions (change 1995-2000 in %)
	
	 – electric power consumption per capita (change 1995-2000)
	
	 – share of electricity generated by coal (change 1995-2000 in %)
	
	 – share of electricity generated by natural gas (change 1995-2000 in %)
	
	 – deforestation (1995-2000 in %)
	
	 – freshwater withdrawal (change 1995-2000 in %)
		a) 'sustainable development':
		   – transport
		   – energy efficiency
		   – waste avoidance
		   – renewable energies
		   – recycling
		
		 b) 'environmental quality':
		   – protection of nature and biodiversity
		   – forest protection
		   – protection of ground water
		
		 c) 'health and environment':
		   – information about substitution/avoidance of dangerous chemicals
		   – reduction of air pollution by heavy metals
		   – release of genetically modified organisms
		
		 d) 'climate change':
		   – reduction of greenhouse gas emissions
		   – reduction of fulminated greenhouse gas emissions
		
		 e) environmental taxes and charges in % of GDP

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[7] Source for State Indicators and Response Indicators: World Bank, The Little Green Data Book, Washington 2003; sources for Policy-Response Indicators: Homepages of Ministries of the Environment of the EU member countries (http://www.europa.eu.int/abc/governments/index_de.htm#members); International Monetary Fund, Government Finance Statistics Yearbook 2002, Washington 2003; World Bank, World Development Indicators 2002, Washington 2003; own calculations. A weighting of indicators has not taken place.

Through the application of cluster analysis, we can mark out three country groupings as follows:

Group I: Denmark (DK), Sweden (S), Germany (D), Austria (A), United Kingdom (GB), Finland (SF), Belgium/Luxembourg (B/L), Netherlands (NL), Ireland (IRL);

Group II: Latvia (LV), France (F), Lithuania (LT), Portugal (P), Spain (E), Italy (I), Malta (MAL), Greece (GR);

Group III: Cyprus (CY), Hungary (HU), Slovania (SLO), Poland (PL), Slovakia (SK), Czech Republic (CZ), Estonia (EST), Romania (RO), Bulgaria (BG).

These groups tend to differ from one another in the sense that members of Group I enjoy the best environmental states and the strictest environmental policies, whereas the members of Group III show the worst states of the environment and conduct the weakest efforts to protect the environment. Within these three groups, respective members are sorted backwards according to the state of the environment and environmental protection measures (hence, Denmark is the country with the highest, and Bulgaria the one with the lowest environmental standards). Thus, Group I can be identified as the core group, because it is, in the first instance, only this group for which harmonization efforts in the environmental realm or even further environmental measures appear to be sensible. In sum, the following coordinate system emerges from our analysis:

Regarding the realm of environmental policy, Figure 2 allows to explicitly segregate the core group (above the bisecting line of the angle) on the one hand, and the two other groups (below the bisecting line of the angle), on the other hand. The closeness of the individual countries to the center of the core group can be read off the abscissa. Germany shows the highest homogeneity with the remaining countries of the core group; it is followed by Austria, Belgium/Luxembourg, the United Kingdom, Denmark, Finland, Sweden, and the Netherlands. Ireland, which is relatively remote from the other members of the core group, would not be needed for closer cooperation.

Furthermore, Figure 2 entails that Denmark, Germany, the United Kingdom, and Austria are particularly firmly embodied in the core group; and their location is comparatively remote from the closest alternative group (i.e., Group II) (high *relative* similarity to the members of the core group). Since these countries, in addition, are even absolutely homogenous with the other members of the core group, they may have a comparatively great interest in enhanced cooperation. That conclusion would not hold for Ireland. On the one hand, Ireland is – in *absolute* terms – rather divergent vis-à-vis the other members of the core group. Moreover, it appears not to be firmly rooted in the core group. On the other hand, the preferences of environmental policymaking in Ireland are almost as similar to the preferences of the closest alternative group as to those of the core group.

Figure 2

Enhanced Cooperation in the Realm of Environmental Policy
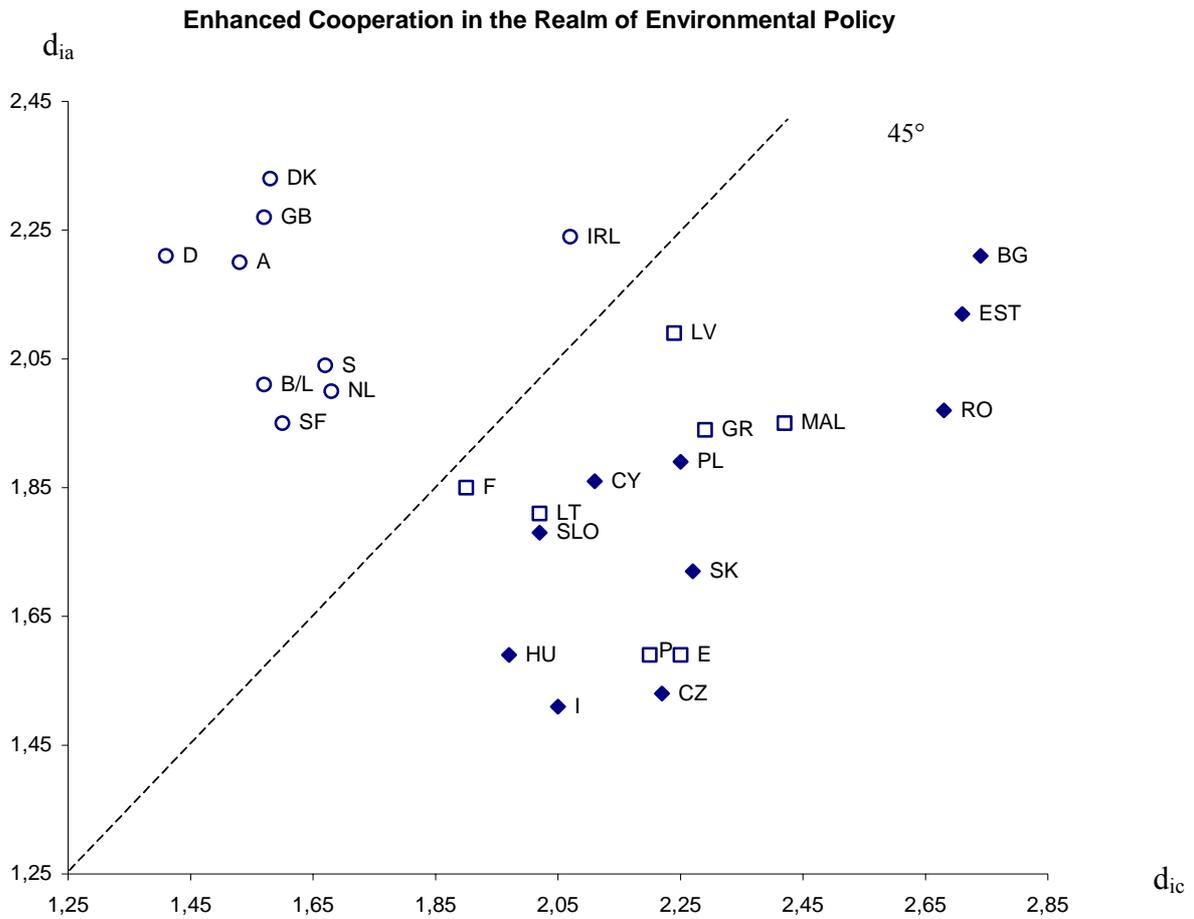
d_{ic} = average Euclidean distance between country i and the other members of the core group;

d_{ia} = average Euclidean distance between country i and the members of the alternative country group;

○ = members of the core group (Group I);

□ = members of Group II;

♦ = members of Group III.

In the medium term, France, Lithuania, Portugal, Latvia, Spain, and Greece would appear as the most likely candidates for a participation in an enhanced-cooperation activity with the members of the core group (except for Ireland). If, however, the members of the core group pursue the objective to extend joint efforts aiming at environmental protection, a participation of the mentioned countries of Group II in a closer-cooperation project would be rather unlikely, because these countries would need to be ready to accept a substantial extension of their present environmental standards. That would be necessary in order to catch up merely with the present standards of the core group.

4.2 European Social Policy

The identification of the preferences of the EU member countries in the realm of social policymaking has been based upon a comparison of their systems of social security, which reflect long-term societal preferences and traditions. Therefore, they can be conceived as being independent of short-term political aspects. In his seminal work 'The three Worlds of Welfare Capitalism', Esping-Andersen identifies three different types of social security systems: the liberal approach following the maxim of a free development of market forces possibly without government interventions and with correspondingly low social standards; the conservative approach, which prefers minimal government interventions and pursues the maintenance of societal class distinctions; and the social democratic approach, which aims at the eliminiation of societal differences through governmental redistribution (Esping-Andersen, 1990, pp. 28). The indicators, which have been used in order to classify the individual member countries according to these three types of a 'welfare state', are listed in Table 2.

Table 2: Indicators of Social Policy (2002) [8]
Indicator group: 'conditions for benefit entitlement'   – minimum period for pension entitlement   – minimum period for unemployment-benefit entitlement   – maximum period unemployment benefits are paid   – retirement age (standard and early pension)
Indicator group: 'level of protection'   – share of public social expenditure in GDP   – average unemployment benefit and net-replacement rate of pension in % of (last) net wage
Indicator group: 'funding issues'   – ratio of funding by contributions to funding by taxes   – ratio of private health-care expenditures to total health-care expenditures (private and public)
Indicator group: 'distributional issues'   – GINI coefficient 2002   – ratio of highest marginal income-tax rate to average income-tax rate   – ratio of social-security contributions of employers to contributions of employees

[8] Data sources: MISSOC – Mutual Information System on Social Protection in the EU Member States and the European Economic Area, 2003; MISSCEEC II – Mutual Information System on Social Protection in Central and Eastern European Countries, 2003; Gesellschaft für Versicherungswissenschaft und -gestaltung e.V. (2003): Studies on the Social Protection Systems in the 13 Applicant Countries; International Monetary Fund, Government Finance Statistics Yearbook 2002, Washington 2003; World Bank, World Development Indicators 2002, Washington 2003; own calculations. The indicators are not weighted.

Regarding the design of their social security systems, these three country groupings can be classified as follows: The members of Group I (Scandinavian countries) pursue a social democratic approach with high social standards and comprehensive redistribution. The members of Group II (countries of core Europe) prefer a conservative approach with moderate social standards. Finally, the members of Group III distinguish themselves through a liberal social policy with low social standards and minimal government interventions. As a core group for a closer-cooperation project, most likely Group II will qualify in this policy realm. The Scandinavian country group is too small, the countries of Group III could pursue closer cooperation in the sense of a further harminization of social standards – as could the countries of Group II. At the moment, however, raising social standards further appears to be rather unlikely, particularly for the members of Groups I and II. But in the medium run, the members of Group III could – due to increasing stages of economic development and increasing per-capita income – approach the members of Group II with respect to the preferences regarding social standards and policymaking.

By means of these indicators, cluster analysis yields the following three country groupings:
Group I: DK, S, SF
*Group II*: F, D, A, NL, L, B, GB, IRL, CY
Group III: SK, SLO, CZ, HU, E, BG, RO, P, EST, GR, PL, MAL, I, LV, LT

As one could have expected, a core group can be explicitly identified and segregated from two other groups even for the social policy realm, as Figure 3 suggests. In this policy field, particularly the Netherlands, Belgium, or the United Kingdom are comparatively firmly rooted in the core group. Cyprus, that had been assigned to the core group at the very end of the cluster analysis, is almost indifferent between the core group and neighboring Group III. Since, in addition, Cyprus appears to be very dissimilar (in absolute terms) to the core group as well as to neighboring Group III and distinguishes itself clearly from all other countries with respect to its social policy, participation in closer cooperation does not appear a promising option for Cyprus. In general, it is striking that all countries, with the notable exceptions of Denmark, Latvia, Lithuania, and Slovakia, are located relatively closely to the bisecting line of the angle in this policy realm. This implies that the countries do not differ as strongly from one another in this policy field as they do in the realm of environmental policy.

The next step is to address the question of which are the countries that could opt in favor of closer cooperation in the social policy realm. If the core group takes the initiative, we need to clarify at first how the enhanced-cooperation project will be designed as far as its substance is concerned. In the case of a reduction of social standards, the core group would approach Group III in the social policy field. Assuming that the big countries (Germany, France, and the United Kingdom), or at least two of them, would be the initiators of closer cooperation, Spain, Bulgaria, Poland, and Portugal would be more homogenous candidates (in absolute terms) in the case of reducing social standards, than, e.g., Ireland, Belgium, the Netherlands,

and Cyprus. Consequently, Germany, France, and the United Kingdom should have an incentive to attract, first of all, Austria out of the core group, subsequently Spain and Bulgaria of Group III, afterwards Luxembourg and lastly Portugal and Poland from Group III to participate in enhanced cooperation.

Figure 3
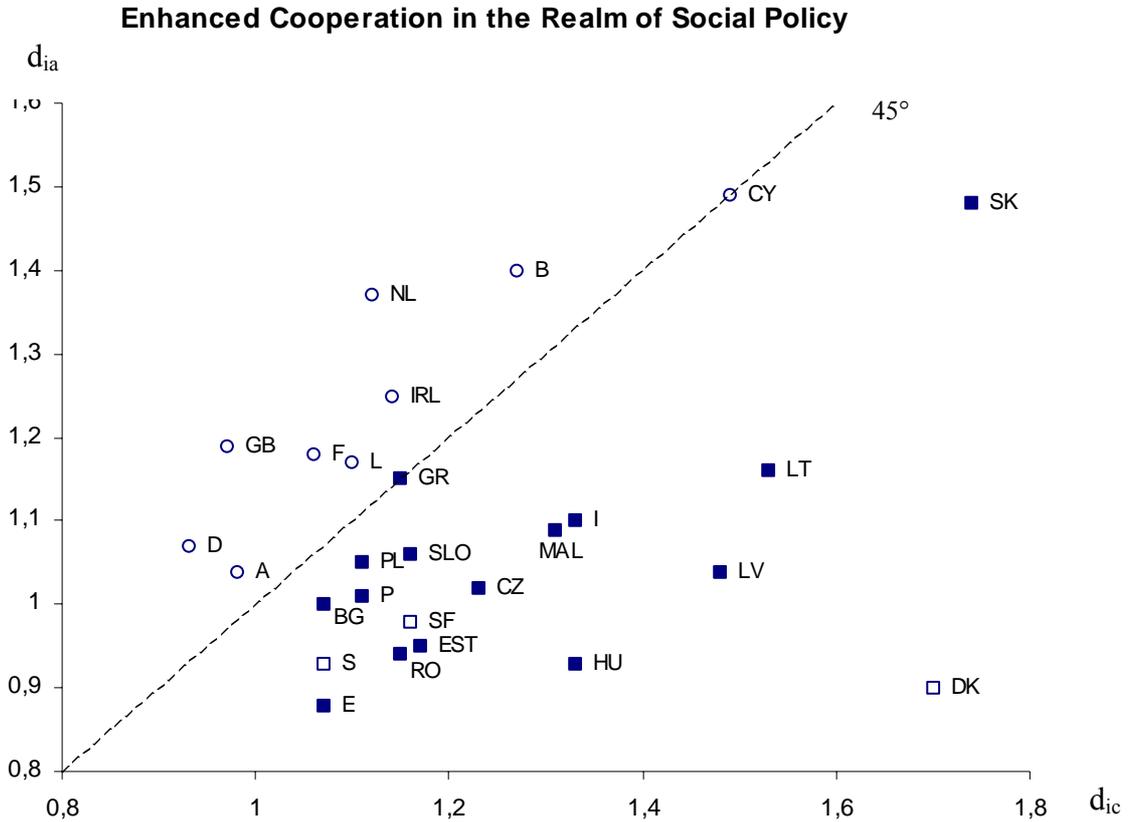
Enhanced Cooperation in the Realm of Social Policy

d_{ic} = average Euclidean distance between country I and the members of the core group;

d_{ia} = average Euclidean distance between country I and the members of the alternative country group;

○ = members of the core group (Group II);

□ = members of Group I;

■ = members of Group III.

From the viewpoint of Spain, Bulgaria, Portugal, and Poland, however, closer cooperation in the realm of social policy with Germany, France, the United Kingdom, Austria, and Luxembourg would actually appear to be irrational, because they are, despite the relatively high absolute similarity with the members of the core group, even more similar to the members of their own group. Hence, it would presumably get relatively expensive for Germany, France, the United Kingdom, Austria, and Luxembourg to persuade the mentioned countries to participate in a common closer cooperation project.

Hence, for the initiators of enhanced cooperation, the question comes up what appears to be more sensible: an enhanced cooperation in social policymaking exclusively with members of the core group would require the involvement of Belgium and Cyprus in order to achieve the critical number of nine countries. But, in absolute terms, Belgium and Cyprus are relatively heterogeneous vis-à-vis to the other members of the core group. The alternative solution would be to proceed without Belgium, Cyprus, and possibly Ireland and the Netherlands and instead attract countries such as Poland or Spain – an alternative that would become probably quite expensive. Another likely variant could be an enhanced cooperation in social policymaking between Germany, the United Kingdom, France, Austria, Luxembourg, the Netherlands, Ireland, Belgium, and Greece. This way, one could go forward without the deviator Cyprus, and the involvement of Greece would be not too expensive, because Greece is almost indifferent between its own Group III and the core group.

For individual members of Group III, the participation in a closer-cooperation project in the social policy realm, that is to be initiated by the members of the core group, would become more attractive in the course of time, if the demand for social security in those countries becomes stronger; this will, in turn, depend on the growth rates in per-capita income.

4.3 Common Agricultural Policy

The Common Agricultural Policy (CAP) can be conceived as being the most important common policy realm in the EU, because the Union still directs roughly one half of its expenditures into this policy field. Actually, the most prominent objectives of CAP in the past include safeguarding the incomes of the rural population and the stabilization of agricultural markets. However, the increasing pressure on behalf of the WTO aiming at the reduction of export subsidies and the enormous costs, which have been associated with the traditional politics of subsidization, have brought the EU already in the past to engage in reforms of agricultural policymaking. The accession of East European countries with a strong agricultural orientation will further increase this pressure for reform (Koester, 2001, p. 7). Although market and price policies will remain an essential instrument of the CAP in the future, political authorities tend to place increasingly greater emphasis on direct income transfers to farmers as well as a stronger support of the development of rural areas and environmental protection (Koester, 2001, p. 10).

Table 3: Indicators of Agricultural Policy (2002) [9]

Indicator group: 'production'

crops
     cereals, maize, potatoes, sugar beets, sunflowers
     (each area under cultivation in % of agricultural area)
     vegetables, fruits (each in t/area under cultivation)
livestock numbers and products
     beef and veal, pigmeat, mutton and lamb, poultry
     (each in % of total meat production)
     cow milk, sheep milk, eggs, fishing (each in MT/thousand population)

Indicator group: 'nature protection and rural development'

share of arable land in total land area
fertilizer consumption per ha arable land
deforestation
ecologically worked area (in % of arable land)
rural population (in % of total population)

Indicator group: 'importance of the agricultural sector'

agricultural expenditures in % of GDP
share of the agricultural sector in GDP
share of employed persons in agricultural sector
value added per employed person in agricultural sector (in thousand €)
RCA coefficient for agricultural products
share of agricultural products in total exports
rural population (in % of total population)
average size of agricultural firms in ha
expected net position EAGFL per capital of population in 2013

Indicator group: 'yields and technical equipment'

cereals, potatoes, sugar beets (each KG/HA)
beef and veal, pigmeat, lamb meat, cow milk (each KG/animal)
technical equipment (tractors/1000 HA arable farm land)

Against this background, we clustered the member countries of the enlarged EU with respect to their preferences for and against these reform efforts and regarding their agricultural structures and their resulting preferences in regard to support measures (indicators see Table 3). The cluster analysis brought about the following country groupings:

Group I: SF, S, A, D, F, GB, B/L, NL, I;
Group II: GR, E, P, SLO, CY, MAL;
Group III: CZ, HU, PL, EST, LV, LT, SK, BG, RO;
not assigned to any group: DK, IRL.

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[9] FAO, United Nations (2003): Production Yearbook 2002; World Bank (2003b): World Development Indicators 2002; International Monetary Fund (2003c): Government Finance Statistics Yearbook 2002; International Labour Office (2003): Yearbook of Labour Statistics 2002; OECD (2003): International Trade by Commodity Statistics 2002; own calculations.

Figure 4
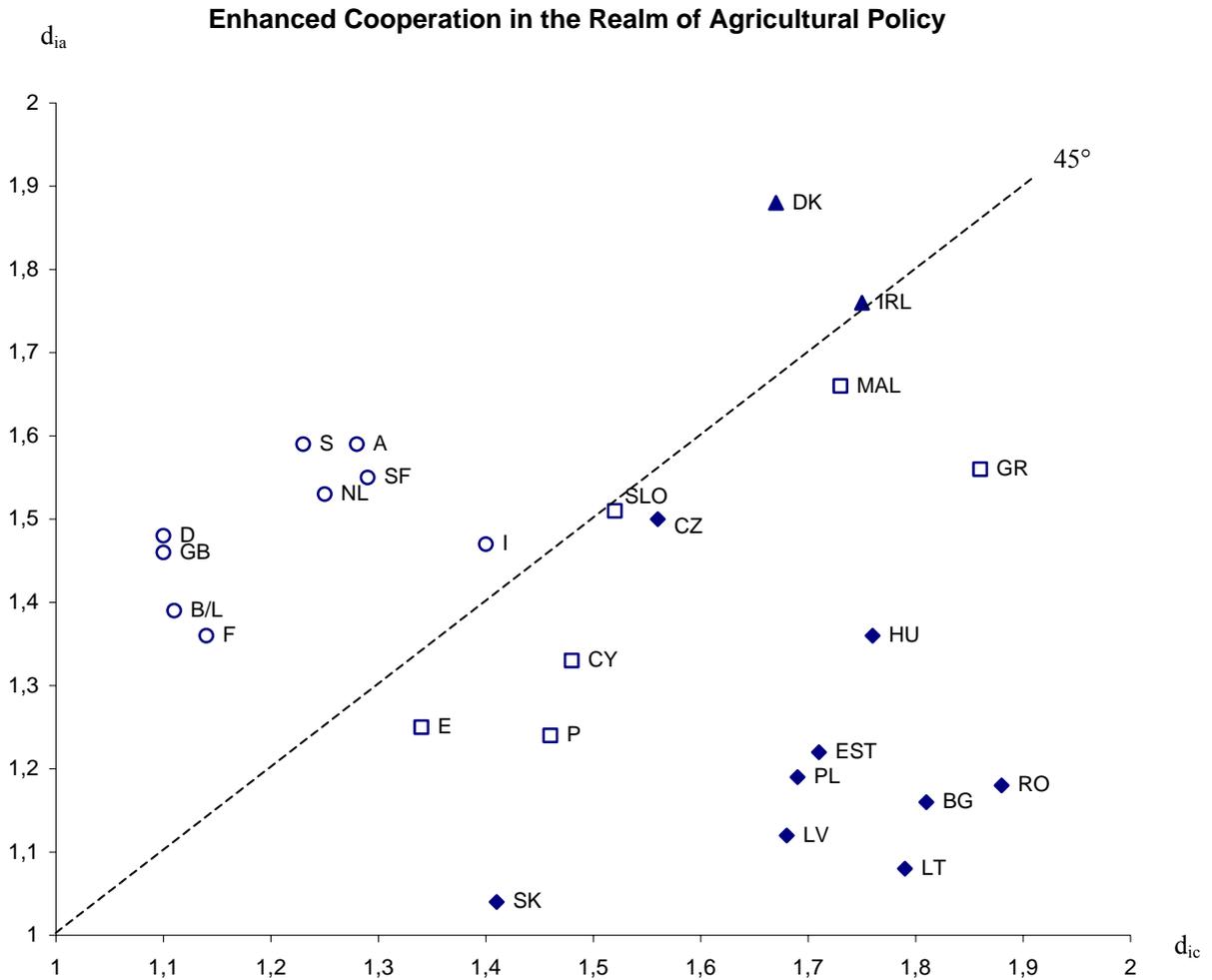
Enhanced Cooperation in the Realm of Agricultural Policy

d_{ic} = average Euclidean distance between country i and the members of the core group;

d_{ia} = average Euclidean distance between country I and the members of the alternative country grouping;

○ = members of the core group;

□ = members of Group II;

♦ = members of Group III;

▲ = IRL, DK

The three country groupings can be characterized as follows:

Group I: strong preference for landscape protection, relatively weak preferences for protectionism in the agricultural sector;

Group III: weak preference for landscape protection, strong preference for protectionism in the agricultural sphere;

Group II: located between Groups I and III.

Regarding the CAP, our findings are relatively straightforward again. The core group is relatively isolated; an enhanced cooperation could *theoretically* start with a country grouping consisting of Germany, the United Kingdom, Belgium, Luxembourg, France, Sweden, the Netherlands, Austria, and Finland. Since even the net payers of the Community are to be found in this group, the interest in closer cooperation would presumably point rather in the direction of reducing the cost intensive protection. Group III, consisting of net recipient countries which are still structured relatively strongly agrarian, obviously represents diametrically opposed interests. This group, too, would present the number of members necessary for initiating closer cooperation.

The practice of closer cooperation in the agricultural sector, however, will be restricted, because the parameters of political action are limited: the CAP has been characterized by three essential principles – the unity of markets, the priority for the demands of the community, and financial solidarity. This entails that all measures of market order policy need to be uniformly applied throughout the Community and the expenditures in the agricultural budget need to be financed through the common EU budget (EC Treaty, Articles 40 pp.). Thus, there is in fact no leeway for an enhanced cooperation of individual members of the Union in the realm of agricultural market orders including the decisions regarding the direct income transfers. Closer cooperation would be, at all events, conceivable as the objectives 'Maintaining a manifold agrarian structure' or 'Protection of the environment, agriculture, and natural resources' are concernced. In addition, closer cooperation in the direction of consumer protection could be motivated; particularly if one accounts for the preferences of Group I.

5. Conclusion

The present slow down in the ratification process of the Treaty establishing a Constitution for Europe shows that the simultaneous deepening and enlargement process of recent years, that gained momentum again and again, is not sufficiently supported and sustained by the citizens in the EU. The failures of the referenda in France and the Netherlands reveals that comprehensive solutions in a Union of 25 or 27 sovereign states become more and more complex and reflect citizens' preferences increasingly less correct. And yet, if political authorities and citizens do not want to abstain from further deepening of the integration process, smaller solutions need to be identified and tested in the first instance. Such solutions can, *inter alia*, consist of a closer cooperation of country groupings within the Union (clubs within the club). If such a cooperation proves to be successful, it can be gradually extended to encompass the entire Union.

This paper demonstrated with respect to selected policy realms how country groupings can be identified by using the technique of cluster analysis, which – in the course of enhanced cooperation – can become drivers of the integration process in the future. On the one hand,

the examples discussed above show that these country groupings can be composed differently – contingent on the policy realm. On the other hand, the analysis suggested which countries could be recruited as potential cooperation partners, if the core group does not show the necessary number of members. In addition, the cluster analysis allows conclusions about the direction in which closer-cooperation projects could proceed. Finally, one can conclude from the calculations which other countries could be gradually attracted to participate in closer cooperation at a later stage, if the tested depth of the integration process proves to be welfare enhancing.

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