# QUALITY OF LIFE IN EUROPE: OBJECTIVE AND SUBJECTIVE INDICATORS

A Spatial Analysis Using Classification Techniques

#### 1. INTRODUCTION

Here we will present the preliminary results of a geographical study<sup>1</sup> among the regions in Europe. It is an exploratory comparative analysis among the regions in Europe that represents the first phase in a larger analysis which aims to study quality of life at the European level.<sup>2</sup>

Our aim here is to show that, in Europe, it is the region (a subnational administrative unit) that is taking on a much more important significance than that of the nation in the study of quality of life.<sup>3</sup> The well-known contribution by Inglehart and Rabier (1984) on the importance of "nationality" in the determination of individual satisfaction is losing its initial significance. Europe, in fact, is going through a phase of profound transformation that would have been unthinkable only decades ago. In a Europe in which the futures of the various populations will have ever more in common, it is very important to have available as much comparative information as possible.

It is our opinion that quality of life studied at a "macro" level,<sup>4</sup> that is at the country level, must be the result of an ensemble of factors referred both to the objective reality of the area under study and also to the evaluations expressed by individuals living within the area itself. Thus, the basic unit of territorial observation takes on an increasingly important role.

#### 2. THE DATA

The statistical sources<sup>5</sup> of the study are:

- Eurostat Yearbook, EU (Regions) in which one finds economic, social and demographic information at three levels of territorial groupings (Nuts 0, Nuts 1, Nuts 2, and Nuts 3);
- Eurobarometer Survey (n. 42, 1994).

Problems were encountered in attempting to unite these two separate statistical sources at the same territorial level as there are two European International Agencies that produce these two sources.<sup>6</sup> Our comparison deals with a geographic situation that is a merger of different territorial levels, and our data is at times at a high level of detail, at others intermediate, and, occasionally, is even at the national level. The comparison is made on 115 European observations, but we hope, with the help of appropriate agencies, to pursue further research. We must, in fact, underline the need for improvement in the quality and comparability of European statistics, particularly considering the ever increasing need for comparison in this area. In addition, while Eurobarometer is a questionnairebased survey that has already been tested and in use for many years, the data published by Eurostat have an aim that is more geared to diffusing information than to promoting scientific research and a comparison between the two presents some substantial difficulties. Some difficulties are connected to the definition of the character surveyed, and others pertain to content, while still others are of a technical nature if we use, as in this case, printed data. Here are some examples. Definitional problems: measurement of the infant mortality rate implies a definition of stillbirths, on which an important indicator for the individuation of demographic unease is based, but the definition of "stillbirth" is not the same across the board. This same type of problem applies also to the definition of "unemployed"; contextual problems: educational structures differ in the various countries of Europe, be it with respect to length of mandatory schooling or to the structure of the various school levels. Specific rates of scholarization cannot therefore be measured while if we calculate generic rates (educated population as a ratio of total population) the ratio reflects the age structure of the population and loses its comparative significance; technical problems: certain

phenomena are measured by means of published indicators<sup>7</sup> with a structure that is so generic as to render territorial differences practically invisible.

#### 2.1. The Indicators

## 2.2. Objective indicators

A first evaluation of the quality of life was done considering just the objective component. The selected objective indicators refer to the reality of the considered territorial units and are indicators of the "environment" where people lives. So, it's possible to compare societies using indices that summarize a variety of important objective social indicators. The indicators are chosen on the basis of the social unease for stressing the most difficult and problematic realities inside the countries of the European Union.

A number of objective indicators were selected that were made comparable by a reproportioning in which minimum and maximum values are represented by two extremes corresponding to two actual regions. Since our objective is focused, above all, on the outlining of areas of "unease," the observational unit that assumes a higher value than the indicator is that which presents greater unease in that category.

Thus, we have aggregated reproportioned data and obtained 11 indicators. Some of these correspond to the initial indicator (ex: GDP/pop.; suicide rate); others are the result of an aggregation (death/pop. for environmental reasons) so as to obtain a synthetic indicator. The lack of information in some cases prevented further probing. Indicators of unease:

- Demographic unease (demographic aging low birth rate migratory discount) [IDEM]
- Economic unease (complement of per capita GDP.) [ECO]
- Employment unease (unemployment of youth, adults, women) [OCC]
- Gender Disequilibrium (among the working and unemployed populations) [SEX]
- Unease in the healthcare system (beds/pop.; doctors/pop.)
   [SAN]
- Percentage growth of agricultural population [AGR]

- Low percentage of population in industry [IND]
- Low percentage of population in the service sector [TER]
- Lack of roads infrastructure (highways/sqkm cars/pop.) [AUTO]
- Social unease (rates of suicides) [SUI]
- Deaths for environmental causes (cardiovascular deaths, tumors) [AMB]

#### 2.3. Subjective indicators

The subjective evaluations of the persons interviewed are reported for the same territorial units used to calculate the objective indicators.

The following 6 subjective indicators were selected and are expressed across 18 types of responses (ex: life satisfaction is composed of 4 types of responses: Very satisfied, Fairly satisfied, not very satisfied, not at all satisfied):

- Life satisfaction [MSOD-ASOD-AINSOD-MINSOD]
- Definition of oneself as religious or not [REL-NOREL]
- The economic optimist/pessimist index (ECO) is constructed on the basis of the assessment of the changes in the Nuts's economic situation over the past 12 months and over the next 12 months. The index represents the individual evaluation of the general economic situation of the country [ECOPES-ECONEU-ECOOTT]
- The financial situation optimist/pessimist index (FIN) is constructed on the basis of the assessment of the changes in the financial situation of an individual household over the past 12 months and over the next 12 months. The index represents the individual evaluation of the financial situation of the family [FINPES-FINNEU-FINOTT]
- Social class to which the subject evaluated belongs [COPERAI-CMEINF-CMESUP]
- European Social Grade (7-point scale) based on the recommendation of the European Society for Opinion and Marketing Research (ESOMAR) to harmonize the measurement of social grade across borders and elaborated upon by Eurobarometer [MAXESG-NEUESG-MINESG]

We consider these indicators for the two following levels of the analysis. At the first step we consider all the listed subjective indicators. These indicators express jointly the individual evaluation of quality of live, the individual evaluation of the economic situation of the country, the financial situation of the family and the evaluation the individual social class.

At a more detailed level, using only the first four indicators listed, we express the quality of life in terms of social well-being (SWB). The expressions noted show how the individuals evaluate theirs lives, in terms of global satisfaction, but also in terms of waits and expectations of theirs future. Individualism is a cultural variable. Referring the SWB to the territorial units which are very different for history, tradition, religion, language, habits, etc. we try to identify the contribution of the affective reaction (moods and emotions) component to the quality of life over the territory.

#### 3. RESULTS

Cluster analysis is a very interesting kind of explorative analysis in geographic studies. In our case, it allowed for the evaluation of various levels of aggregations of the European regions. Depending on the level at which a similarity occurred a number of different clusters were formed. Obviously, the number of clusters is higher when there is greater similarity. In this case, small very specific clusters formed in which only very similar regions were grouped together. As similarity progressively decreased also the number of clusters decreased and more numerous groups were formed with less specific characteristics in common. Ward's method was used.<sup>8</sup>

#### 3.1. Objective Quality of Life

We have considered the first level of aggregation to be that of 82.43% similarity corresponding to the formation of 75 clusters (of which 47 are unitary). This point signals the beginning of a fusion among regions of different nations. We are, therefore, at a high level of detail that we consider only in order to put together this particular aspect of the analysis.

At a level of aggregation with similarity so high many regions remain isolated and constitute clusters with just one observation. Clearly the first aggregations are formed by a limited number of observations. It is important to note that the first aggregations form within the nations themselves and that they are made up of areas that are already clearly delineated, oftentimes, by a joining of adjacent areas. These first clusters show the strongest ties that each nation has internally and in many cases one senses historical and cultural ties that characterize many areas in Europe. The indicators used are objective and thus the aggregations represent areas that are homogenous from an economic, social and demographic point of view.

At a slightly lower level of similarity (80%) two clusters have formed between regions in different nations: the first region that joins another in a different country is Antwerp (Belgium) with Hessen (Germany); the next is the North-West region of the UK which joins with Lisbon (Portugal).

It should be noted that, in these first aggregations, all the capitals (or capital regions), with the exception of Lisbon, remain isolated and do not present any similarities either among themselves or with other regions.

Table I (see appendix) shows the scheme of evolution of the cluster formations over successive stages of aggregation that we indicate with the number of the clusters that form (4-7-16-20).

Increasing the size of the clusters, the differences between the value of intermediate values declines because different realities merge. However, even an extreme that would divide Europe into two, three or four parts, can be interesting. For example, dividing Europe into only four typologies leads to the exact reconstitution of the national territory in the cases of France, the Netherlands and the UK. Other countries show either similarities with bordering states (France-Belgium) or distinct internal divisions (Italy) that lead to the formation of groupings with other countries. Italy is noticeably divided into two typologies, one which aligns with Germany, the other with Spain, with the exception of Rome (region: Lazio) that joins with the region of Madrid.

Our objective, however, is not that of recreating nations. On the contrary, it is of singling out small areas within countries that display homogeneity with areas in other countries. Thus, it is more inter-

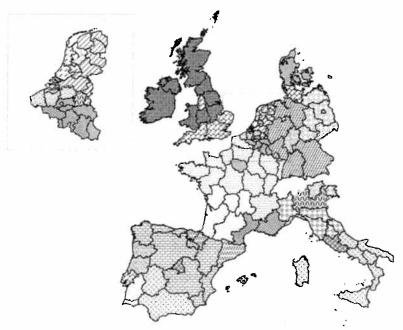


Figure 1. Objective indicators: cutting the clustering tree at 20.

esting to analyze the typologies at a higher level of similarity with the formation of a greater number of clusters.

Table II (see appendix) contains average values of the indicators at various levels of cluster size (4-7-16-20) selected by using a tree clustering analysis.

In order to compare the transformations that take place at the successive levels of cluster formation, we have placed the values obtained on the map of Europe.

In this presentation we proceed, however, to the examination of only the typologies that it form at the level of 20 European areas (Figure 1) and we compare them with the final situation represented by the four larger clusters shown in Figure 2.

The maps should be interpreted together with the outline in Table I (see appendix) and the average values in Table II (see appendix).

Figure 2 points out well defined areas that do not correspond in any way to national boundaries; in fact, they outline areas that are common to two or more countries.

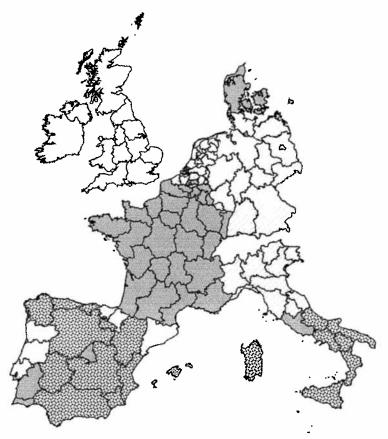


Figure 2. Objective indicators: cutting the clustering tree at 4.

The first larger cluster is comprised of 37 observations that exactly recreate the territorial boundaries of France, show a formation of some adjacent regions in Belgium (including Brussels) and two European capitals (Lazio, which includes Rome, and Madrid). This larger cluster has an average level of aging, a low level of industrial development, a good environmental level, but a high level of suicide.

At a more detailed level of observation, we see that one cluster (1.20.10)<sup>9</sup> unites two capitals in southern Europe; another (1.20.1) unites Brussels, Paris, two big cities such as Hamburg and Bremen and the nations of Denmark and Luxembourg. These two clusters have an analogous process of demographic aging and of service

sector activity, but the first cluster shows greater economic, employment, and health unease and a gender disequilibrium; the second has greater social and environmental unease. A great portion of France remains compact and very stable (1.20.12). Here economic unease is stronger than employment unease (there is a high percentage of agricultural population); in addition, there is a high level of social unease that, together with cluster (1.20.13), joins other regions in France and reaches the highest level in all Europe. Two regions in Southern France group instead with Belgian regions (1.20.4). The second larger cluster, comprised of 32 observations, has a high level of demographic unease with aging process and low birth rate each as strong factors. Economic unease is intermediate, industrial activity is high and health and environmental unease is mediumhigh. Various Italian regions are included in this group, among which the north-central region which forms a compact and stable group (2.20.15) characterized by the strongest aging process in all of Europe.

One cluster (2.20.7) exactly unifies all the German regions of the eastern area where economic and environmental unease are very high. In fact, only the central-north area of Portugal (2.20.19) has a higher level of economic unease, with the difference that the Portuguese area has the highest percentage of agricultural population in Europe and, thus, does not have a high level of unemployment.

The third larger cluster, comprised of 27 observations, extends across the whole of northern Europe to which is joined also Lisbon. This cluster has a higher level of demographic development, with a minimum employment unease, a low level of gender disequilibrium and a better healthcare situation. At the detailed level, Lisbon initially joins with Berlin and some English regions among which is also the area of London (3.20.5), creating a cluster with a minimum of gender disequilibrium and a minimum of employment unease. There is a cluster comprised of only Dutch regions (3.20.16) that is demographically young, with a stronger level of economic than employment unease, a good environmental situation and an excellent healthcare situation.

The fourth larger cluster, made up of 19 observations, remains separated from the rest of Europe over an extended period of time and only at a very low level of similarity does it join to the preceding larger clusters. It is a cluster with a fairly high level of aging and with a strong unease extended across all fields. However, with respect to the others, it has a better environmental situation and a situation of social unease that is worse.

Cluster 4.20.8 unites all the regions of southern Italy to two regions in the south of Spain; cluster 4.20.9 joins only Spanish regions. A comparison of the two clusters indicates that the first has a lower level of demographic aging, a greater level of gender and healthcare system disequilibrium, a lower level of industrialization but also greater unease in the service sector and a higher suicide rate. The two clusters have a high percentage of agricultural population. It should also be pointed out that the first nuclei of similarity to come from the cut of the tree at the 82.43% similarity level already joined together two initial groups of Spanish regions (Aragon-La Rioja and Cantabria-Castilla) and two Italian regions (Campania-Sicilia and Puglia-Basilicata-Sardegna) which represent the first nuclei of the two groupings.

#### 3.2. Subjective Quality of Life

If we apply once again the same procedure of cluster analysis using only subjective indicators, taken from Eurobarometer, the situation changes greatly. The first level of aggregation that signals the beginning of a fusion among regions of different nations is at 88.24% level of similarity. That is an aggregation which occurs earlier than with objective data.

From a first glance taken from the examination of the redivision of Europe into 4 larger clusters, the countries that resulted as being more delineated by the objective data (France, Germany, and the UK<sup>10</sup>), now show a greater internal heterogeneity. On the contrary, we see a more defined reality among the Mediterranean countries. In the case of Spain and Portugal, we observe a greater internal homogeneity and a higher level of similarity between the two countries. Italy becomes almost entirely aggregated leaving two regions isolated (Tables III and IV, see appendix).

Let us compare the redivision set out in 20 clusters in which greater heterogeneity becomes evident, with that of the more aggregated level formed by the 4 larger clusters.

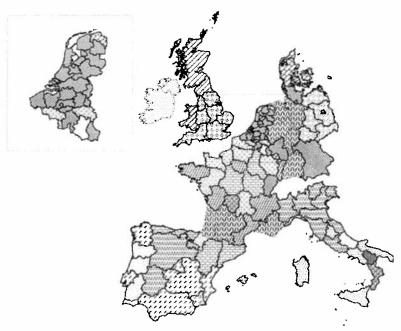


Figure 3. Subjective indicators: cutting the clustering tree at 20.

With 20 clusters we can see common aspects among individual regions or among groupings of regions which are often adjacent to one another though they often belong to different countries (Figure 3).

The highest life satisfaction is seen in Denmark which joins to a Dutch region (Groningen) and a German one (Saarland) (cluster 1.20.5); followed by Ireland and Northern Ireland which, according to this profile, join together (cluster 2.20.17). The greatest dissatisfaction is found in Portugal (cluster 4.20.20) followed by certain regions in the north-center of France (cluster 3.20.8) and Spain (cluster 4.20.18).

Even zones in the south of Italy also have a widespread level of dissatisfaction, though they show a less categorical response, as there is a higher percentage value found for the response "fairly dissatisfied" (cluster 2.20.12).

The most pessimistic view of a population towards its own country's economic situation is found in certain regions of the UK (cluster 3.20.16); the most optimistic, apart from two small moun-

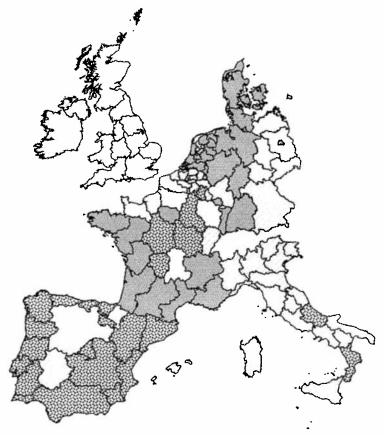


Figure 4. Subjective indicators: cutting the clustering tree at 4.

tain regions, one in Italy (Basilicata), the other in Spain (Navarra), is found in Ireland and Northern Ireland (cluster 2.20.17), in Denmark joined to the Dutch region of Groningen and the German region of the Saarland (cluster 1.20.5). Oddly, not far behind there is also the aggregate of southern Italy (cluster 4.20.12). Even the evaluation of the financial situation of one's family, thus narrowing the scope of the indicator to the direct personal financial situation, reconfirms pessimism for numerous regions in the UK, followed by an area that is economically developed such as Hamburg, Bremen and the Pays de la Loire. It should be added that the highest European Social Grade is reached by these last three regions and by all the Dutch regions that join in one cluster, with the exception of Zeeland

(1.20.1). The lowest level of this indicator is found in Portugal and in some mountain regions of various countries: Calabria (IT); Limousin (FR), and La Rioja (ES).

The evolution of the clusters examined in the successive phases, that is progressively considering a smaller number of clusters, reinforces the presence of typologies internal to the nations that are repeated also in other nations.

Comparing these results with the groups formed with the preceding objective data, reconfirms that the objective situation is much more defined and traceable to national boundaries than the subjective situation. With the objective indicators cutting the clustering tree at 16, some national uniformities emerge that were not seen with subjective indicators. Nations are better defined with objective data at higher levels of aggregation (8 and 4 clusters). Subjective data reconfirms subnational area divisions.

The most glaring example is France: a real puzzle at the subjective level, and a compact unit at the objective level.

Portugal represents an exception as with objective data it is fragmented, something that with subjective data is not seen at all. In part this also occurs for Italy which, with subjective data, it is more uniform though separate regions can be seen.

#### 3.3. Social Well-Being

If we represent the quality of life just on the basis of the individual evaluation expressed as the life satisfaction index plus the optimist/pessimist of the future life indices we obtain a possible evaluation of the SWB. Adding the evaluation component due to the religious sense that in other studies on the Italian and European regions<sup>11</sup> showed his importance as decisive element of life satisfaction. The SWB map shows a extreme fragmentation that is free from the national borders and much more marked than obtained before. The national borders are fuzzy with the exception of the former Germany and partly of the United Kindom which are the only areas showing a solid territorial identity (Figure 5).

Many nations can be ideally divided in small areas which are the result of the process of aggregation of regions characterized by similar individual cultural level. In our country, Italy, some clusters of regions reflect the historical and cultural factors of great interest

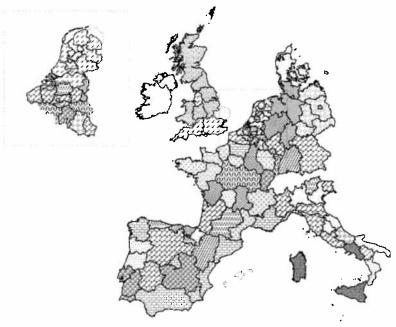


Figure 5. Subjective well-being indicators: cutting the clustering tree at 20.

for many fields of research. According to the previous subjective map which included economic and professional indicators, the differences are more evident.

The passage from the details of 20 clusters to the partition in 4 cluster unify areas defined through the nation (Table V, see appendix). Their definition is less clear than the definition of those obtained through objective or subjective (including social classes) indicators.

It is interesting to observe clustering according to the same criteria in Italy and in Spain. It seems that there are overnational criteria, these are capable to overcome the national borders and individuate similar patterns in different countries. France has now cultural relations with Italy and Spain, even if the geographical distribution of the subjective indicators shows clear borders between France and each of the two near countries.



Figure 6. Subjective well-being indicators: cutting the clustering tree at 4.

# 3.4. Quality of Life with Objective-Subjective Indicators

The results obtained can lead to some difficulty in their interpretation, but at the same time, they cause us to reflect on the importance of the individual evaluative components.

Objective indicators reflect the socio-economic situation, the objective well-being of a country. For example, the main economic indicators, even at a disaggregated level within the country, reflect the overall national political and economic situation.

Subjective indicators express sensations, expectations, hopes and disappointments of a population, aspects that are often connected to the local situation. The subjective indicators are affected by cultural

and historical factors, tradition, habit and, in some cases, "resignation" that lead to a different perception of seemingly entrenched situations. The European reality differentiates itself more under the subjective profile than it does under the objective one.

To intervene on the subjective aspect is much more difficult though it is important to comprehend the subjective reality. It is to this end than we emphasize the usefulness of Eurobarometer information.

The definition of "quality of life" we have set forth in the introduction, alongside the results we have obtained with the large differences between subjective and objective indicators, leads us to consider the two types of indicators together. Social Indicators and Subjective well-being measures are complementary.

In this presentation, the analysis of the formation and transformation of the various groups is by necessity synthetic, but our research is progressing with more recent data and greater territorial detail.

Let us consider the formation of groups at successive levels of similarity, cutting the clustering tree at the different levels (20-16-8-4) (Tables IV and VI, see appendix). As for the two preceding applications we begin with the 4 cluster case and look at from what "kernels" the more detailed groupings are derived (Figure 7).

Larger cluster n.1: The is the first among the 4 clusters to form and thus is the most homogeneous. It is formed by 24 observations which include Germany (former West Germany), all of central-north Italy (excluding Abruzzi and Molise), some Belgian regions, Luxemburg and Denmark. As far as Italy and Germany are concerned, initially the regions of the respective countries group together, though Italy remains separate until cluster n.8.

Larger cluster n.2: formed by 32 observations, includes all of the Netherlands, the UK, and Ireland, some important urban areas in Germany (Berlin, Bremen, and Hamburg) and in France (l'Île de France, Provence, Alpes et Cote d'Azur, Languedoc-Roussillon) and Brussels. It is a cluster that is centered in northern Europe with the exception of the French Mediterranean regions. Among the 6 different realities at the outset only that relative to a part of the UK (North, Yorkshire, East and West Midlands, Wales and Scotland) remain separate for an extended period.

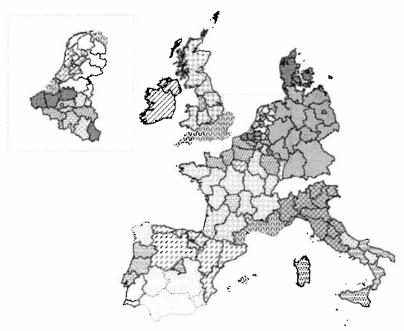


Figure 7. Objective and subjective indicators: cutting the clustering tree at 20.

Larger cluster n.3: formed by 23 observations, this cluster includes Germany (former East Germany), most of the French regions and the two Belgian regions of Liegi and Hainaut. This cluster originates as three clusters from which that which reunited the German regions remains separate for an extended period (3.20.4).

Larger cluster n.4: formed by 36 observations including all of Spain, Portugal, southern Italy and some French and Belgian regions, and the Dutch region of Limburg. The greatest uniformity is seen in the Iberian Peninsula where Spain and Portugal form a single vast area that unites to southern Italy and the two French regions (Franche-Compte and Limousin).

Larger cluster 4 remains separate from the other three for a long time and only at a very low level of similarity does it join with the three other, already formed, aggregates.

The origin of this cluster emerges from 8 highly characteristic initial kernel. Contrary to what may appear to be the case, they are not only groupings within single countries. Table VI

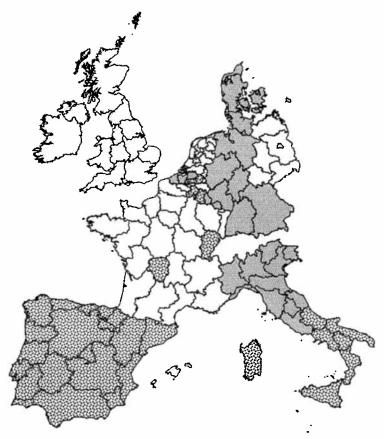


Figure 8. Objective and subjective indicators: cutting the clustering tree at 4.

shows very heterogeneous groupings which form large compact areas only when the distances are increased. For example, one can observe a cluster formed by Limousin, Brabant, Namur, and Lisbon (4.20.9), another formed by many regions in southern Italy together with Madrid (4.20.11); two small mountain regions join together: Basilicata (IT) and La Rioja (ES). The other clusters are within the countries of Portugal and Spain.

It is worth noting that cluster n.4 is not very homogenous. In fact, the two clusters: Spain and southern Italy and Portugal, the French and Belgian regions mentioned, aside from a single Italian region, remain markedly distinct for an extensive period of time.

#### 4. CONCLUSIONS

The results obtained show the different territorial aggregations obtained by the separate use of objective indicators, subjective indicators and the two types of indicator together. From the results we deduce that the use of "nation" (France, Germany, The Netherlands, Italy, etc.) as a standard unit of observation in Europe is losing its significance and can no longer be considered an exhaustive unit of measurement. In order to study quality of life, the unit of "region" (a subnational administrative unit) is taking on a much more important and complete significance than that of "nation."

Looking at the internal situation within each nation, we can see that there are zones characterized by their economic, social, and cultural uniformity, joined together by similar behavior and similar life satisfaction, which do not correspond to national borders but which, instead, are more similar to areas outside their national boundaries and, indeed, to quite distant areas. Our analysis was carried out with three successive lists of indicators: objective data, subjective data, and both objective and subjective data together. The whole of the variables that act on a collective level and those that act on an individual level determined by differentiated interests, internal to the nations, that would be lost with just a single nation-level observation.

As far as availability of disaggregated data, we have noted the difficulty that is encountered in the outlining of comparable territorial units using simultaneously objective and subjective statistical sources. In this phase of research, we feel it premature to set out "typologies" of quality of life in the European areas formed by a grouping together of the territorial unit "region." We have circumscribed our results in an introductory framework.

This is, however, an ideal time to underline the need and the opportunity to orient studies on the quality of life in Europe towards a more analytical territorial level, because the results we have obtained indicate that it is often small areas internal to countries that demonstrate greater similarity with areas in other nations.

## APPENDIX

# TABLE I

Objective indicators: cutting the clustering tree at the different levels (20-16-7-4)

CLUSTERS 20	CLUSTERS 16	CLUSTERS 7	CLUSTERS 4 (Larger Cluste	crs)
Brabant (Wallon+Vlaams) 1.20.44	Brabant (Wallon+Viaams) 1.16.4	Bruxelles 1.7.1		BE [ ]
Hainaut	Hainaut	Brabant (Wallon+Vlaams)	Brabant (Wallon+Vlaam	BE
Liege	Liege	Hainaut	Haineut	BE
Namur	Namur	Lieue	Liege	BE
Luxembourg	Luvembourg	Namur	Namur	8E
Languedoc-Roussillon	Postou-Charentes	Luxembourg		BE
Provence-Alpes-Cote d'Azur	Aquitaine	DANMARŘ		DK
Poliou-Charentes 1.20.13		Hamburg		DE
Aquitaine	Limousin	Bremen		DE
Midi-Pyrénées	Auvergne	Baleares		ES
Limousin	Languedoc-Roussillon	Canarias		ES
Auvergne	Provence-Alpes-Core d'Azur	Medrid		ES
Alentejo 1.20.20	Alentejo 1,16.16	Ile de France		FR
Algarve	Aigarve	Postou-Charentes		FR
Baleares 1.26.10	Balcares 1.16,9	Aquitaine		FR
Camarias	Canarias	Midi-Pyrénées		FR
Madrid	Madrid	Limousin		FR
Lazio	Lazio	Auvergne	Dayse Trommandia	FR
Bruxelles 1.20.1	Bruxelles i.16.1	Languedoc-Roussillon		FR
DANMARK	DANMARK	Provence-Alpes-Core d'Azur		FR
Hamburg	Hamburg	Lazio		FR
Bramen	Bremen	LUSSEMBURGO		FR
lle de France	Ile de France	Alentejo		FR
LUSSEMBURGO	LUSSEMBURGO	Algarye	,	FK
Champagne-Ardenne [1,20,12]	Champagne-Ardenne 1.16,10	Champagne-Ardenne 1.7,6		FR
Picardie	Picardie Haute-Normandie	Picardie Haute-Normandie		FR
Haute-Normandie			rafariano .	
Centre	Centre	Centre	minor i promoto	FR FR
Basse-Normandie	Basse-Normandre	Basse-Normandie	Paranousia.	
Bourgoune	Bourgogne	Bourgogne		FR
Nord-pas de Catais	Nord-pes de Calais	Nord-pas de Calais		FR LB
Lorraine Alsace	Lorraine	Lorraine Alsace	The state of the s	
	Alsace	Arsace Franche-Compte	Provence-Alpes-Core d'/ I Lazio	rr I
Franche-Compté Pays de la Loire	Franche-Compte Pays de la Loire	Pays de la Loire		u I
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Bretagne	Bretagne	Bretagne	Alentejo i	PT
			Alentejo I	PT .
Bretagne Rhone-Alpes  Antwerpen 2,20,2	Bretagne Rhoee-Alpes  Antwerpen 2.16.2	Bretagne Rhone-Alpes  Antwerpen 2.7.2	Alentejo Algarve  Antwerpen	
Bretagne Rhone-Alpes  Antwerpen 2.20.2  Oost-Visanderen	Bretagne Rhooe-Alpes  Antwerpen 2.16.2  Oost-Viaanderen	Bretagne Rhone-Alpes  Antwerpen 2.7.2  Oost-Vlaanderen	Alentejo Algarve  Antwerpen Limburg	PT
Bretagne Rhone-Alpes  Antwerpen 2.20.2 Oost-Visanderen West-Vlaanderen	Bretagne Rhopes-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen	Alentejo Aigarve  Antwerpen Limburg Oosi-Vlaandezen	PT
Bretagne Rhoue-Alpes  Antwerpen  Oost-Visanderen West-Vlaanderen Hessen	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Niedersschsen	Bretagne Rhone-Alpes  Antwerpen  Oosl-Vlaanderen West-Vlaanderen Niedersachsen	Alentejo Aligarve  Antwerpen Elimburg Oost-Vlaanderen West-Vlaanderen	PT 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breisgne Rhone-Alpes  Answerpen Oost-Visanderen West-Visanderen Hessen Trentino	Bretspie Rhope-Alpes  Antwerper Oos-Vlaanderen West-Vlaanderen Niedersachsen Nordrhein-Wesfalen	Bretagne Rhone-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niedersachsen Nodrhein-Westfalen	Alentejo Algarve  Antwerpen  Limburg Goss-Vlaunderen West-Vlaunderen Wiedersachsen	PT 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breiagne Rhone-Alpet  Answerpen Oost-Vianderen West-Vianderen Hessen Trentino Niedersachsen 2,20,6	Bretsgne Rhooe-Alpes Antwerpen Oos-Vlaunderen West-Vlaunderen Niedersachven Nodrhein-Westfalen Hiessen	Bretagne Rhone-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niedersachsen Nordrhein-Westfalen Hessen	Alentejo Alsarve  Antwerpen Limburg Coss-Vlaanderen West-Vlaanderen Niedersachsen Nordshein-Westfalen	PT 2 BE 2 BE B
Bretagne Rhone-Alpes  Antwerpen  Out-Visanderen West-Visanderen Hessen Trentino Niedersschisen Mordthein-Westfalen	Bretsgne Rhooe-Alpes  Antwerper Oose-Vlaanderen West-Vlaanderen Niedersachsen Noodrhein-Westfalen Hessen Rheinland-Pfalz	Bretagne Rhoner-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Niedersachsen Nordrhein-Westfalen Hessen Rhentland-Pfalz	Alentejo Algarve  Antwerpen	BE 2 BE BE BE BE DE DE
Breispe Rhone-Alpes  Rhone-Alpes  Cost-Visanderen West-Visanderen Hessen Trentino Hiedersachsen Nordrheis-Wesifalen Rheinland-Pfalz	Bretsgne Rhone-Alpes  Antwerpen Oos-Vlaanderen West-Vlaanderen Niedersachien Nordrein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg	Bretagne Rhoner-Alpes  Antiverper Cost-Vlanderen West-Vlanderen Noderhein-Westfalen Hessen Rhenland-Pfalz Raden Westfalen	Alentejo Algarve  Antwerpen Limburg  Oost-Vlaanderen West-Vlaanderen Nodersachsen Nordrhein-Westfalen Hessen Hessen	BE 2 BE BE BE BE BE DE DE DE DE
Bretagne Rhone-Alpes  Antwerpen  Lost-Visanderen West-Visanderen Hessen Trendino Nordrhein-Westfalen Rhenitand-Pfala Saden Westenberg	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen Niedersachsen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuestlemberg Bayern	Bresgne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Nosd-hein-Westfalen Hessen Rheniand-Pfalz Baden Wuerttenberg Bayern	Alentejo Aligarve  Antwerpen E Limburg Ooss-Viaanderen Niedersachsen Nordrein-Westfalen Hessen R heindand-P(alz Baden Wuentemberg	PT  BE 2  BE B
Breisgen Rhone-Alper  Annwerpen  L20.3  Oost-Visanderen West-Visanderen Hessen Trestino Friedersschsen L20.6  Nordrheis-Westfalen Rheinland-Pfalz Baden Weettenberg Bayern	Bretsgne Rhope-Alpes  Antwerpen Oos-Visanderen West-Vlaanderen Niedersachsen Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayera Saarland	Breisgne Rhone-Alpes  Antiverpen Cost-Vlanderen West-Vlanderen Niedersachen Nordrhein-Westfalen Hessen Rhenland-Pfalz Baden Wuettenberg Bayerm Saurland	Alentejo Alisarve  Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Nordshein-Westfalen Hessen Rheinland-Pfalz Baden Wuertemberg Elsyen	PT Z SEE Z SEE SEE SEE SEE SEE SEE SEE SEE
Bretagne Rhone-Alpes  Antwerpen  Loss-Wisanderen West-Vilanderen Hessen Trentino Fisidersachsen Nordrhein-Westfalen Rheinland-Pfala Saden Weentenberg Bayern Startland	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen Niedersachsen Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Westfalen Byern Saarland Trentino	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Noderhein-Westfalen Hessen Rheenfand-Pfalz Baden Wuettenberg Bayern Saarland Brandeburg	Alenterjo Aligarve  Antwerpen Limburg Oosi-Vlaanderen Niedersachsen Nordrein-Westfalen Hessen Rheinland-Pfalz Baden Weertemberg Bayern Essern Cartherine	PT
Bretagne Rhone-Alpes  Antwerpen  Out-Visanderen West-Visanderen Hessen Trentino Nicedersachsen Nordthein-Westfalen Rheinland-Pfalz Baden Weettenberg Bayern Santington Santington Brandeburg  2.20.7	Bretsgne Rhooe-Alpes  Antwerper Oose-Vlaanderen West-Vlaanderen Niedernschein Noordnein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg 2,16.6	Breagne Rhone-Alpes  Antwerpen  Oost-Vlanderen West-Vlanderen West-Vlanderen Nordrein-Westfalen Hessen Rhentland-Pfalz Baden Wuertleinberg Bayern Saarland Brandeburg Macklenburg Vorponiniern	Altentejo Altentejo Altentejo Elimburg Gost-Vlaanderen Niedersachsen Nordnein-Westfalen Ressen Ressen Ressen Ressen Ressen Ressen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Elizardoug Brandeburg Elimburg	PT 2  BE 2  BE B
Bretagne Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trention  Nordrheis-Westfalen Nordrheis-Westfalen Reinland-Pfalz Baden Woerstenberg Bayern Brandeburg Brandeburg  Drandeburg	Bretagne Rhooe-Alpes Antwerpen Oost-Vlaanderen West-Vlaanderen Niedersachen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg MacLlenburg Vorposmern	Bretagne Rhoner-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Noed-hon-Westlaien Hessen Rheniland-Pfalz Baden Wuerttenberg Bayern  Barningburg Macklenburg Vorponimern Sachsen	Alentejo Aligarve  Antwerpen Limburg GOSH-Vläanderen Niedersachsen Nordrein-Westfallen Hessen EReinland-Pfalz Baden Wuentemberg Bayern EReinland-Pfalz Bayern ER	PT 2  SE 2  SE 3E  SE 5E  SE 5
Bretagne Rhone-Alpes  Antwerpen  Out-Visanderen West-Visanderen Hessen Trentino Niedersachsen Nordrhein-Westfalen Rhenitand-Pfalz Baden Weentenberg Bayern Brandeburg Bayern Brandeburg Bra	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen Niedersachsen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuestlemberg Bayern Saarland Trentino Brandeburg Macklemburg Vorpommern Sachsen	Bresgne Rhone-Alpes  Antwerpen  Quest-Vlannderen West-Vlannderen West-Vlannderen Nord-hein-Westfalen Hessen Rhentland-Pfalz Baden Wuerttenberg Bayern Sarland Brandeburg Macklenburg Vorponimern Sackben Sackben-Anhalt	Alentejo Aligarve  Antwerpen Elimburg Goss-Vlaanderen Niedersachsen Niedersachsen Nordrhein-Westfallen Hessen Elkosen Baden Weentemberg Elsyen Elsyen Saarland Grandeburg Macklenburg Vorpomme Sachsen	PT 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breiagne Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trentino Trentino Triedrissen Trentino Riedraschsen Louise Bayern Sarriad Branceburg Branceburg Branceburg Branceburg Sachsen Sachsen-Anbalt	Bretsgne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niedsrachten Niedsrachten Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Wwerttemberg Bayern Sartinad Trentino Brandeburg Macklenburg Vorponmern Sachsen Sachsen	Bretagne Rhoner-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Niederscheen Noerfrhein-Westillen Hessen Rheniland-Pfalz Baden Wuertternberg Bayern  Barningburg Macklenburg Vorponimern Sachsen Sachsen Sachsen Sachsen	Alentejo Aligarve Limburg Limb	PT 2 38 2 38 38 38 38 38 38 38 38 38 38 38 38 38 3
Sretagen Rhone-Alpes  Antwerpen  Loss  Antwerpen  West-Vlanderen  West-Vlanderen  Hessen  Trentino  Fliedersachsen  Nordrhein-Westfalen Rheinland-Pfalz  Baden Westenberg  Bayern  Barneburg  Macklenburg  Macklenburg Vorponmern  Sachker	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen Niedersachsen Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuertlemberg Bayern Saarland Trentino Brandeburg Macklenburg Vorponmern Sachsen Sachsen-Anhalt Thuringen	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Noderhoin-Westfalen Hessen Rhenfand-Pfalz Baden Wuerttenberg Bayern Saarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen-Anhalt Thuringen Piemonte V. D'Aosta	Alentejo Aligarve  Antwerpen Elimburg Goss-Viaanderen Niedersachsen Nordrhein-Westfallen Hessen Ekhein-Westfalle Hessen Ekhein-Westfalle Hessen Ekhein-Westfalle Baden Wuerttemberg Bayern Baden Wuerttemberg Grandeburg Anacklenburg Vorpomnik Sachsen Sachsen Sachsen Lowersen Lowersen Sachsen Lowersen L	SE 2 SE SE S
Breiagen Rhone-Alpes  Antwerpen  Cost-Visanderen West-Visanderen Hessen Trentino Fliedersachsen Nordrheis-Westfalen Rheinland-Flätz Baden Wentenberg Bayern Saarland Brandeburg Macklenburg Vorponmern Sachbert Sachbert-Anhalt Thuringen Flemonter-V D'Aosta  **220.15**	Bretspie Rhope-Alpes  Antwepen Oos-Vlaanderen West-Vlaanderen Niedrachsen Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg Macklenburg Vorpommern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta 2.16.11	Bretagne Rhone-Alpes  Antiverpen Cost-Vlanderen West-Vlanderen Nest-Vlanderen Nordrhein-Westfalen Hessen Rhenland-Pfalz Baden Wuettenberg Bayern Sarland Brandeburg Macklenburg Vorponmern Sachsen Sachsen Jennes Vorponmern	Alentejo Algarve Limburg Limbu	BE 2 BE 3 BE 3
Bretagne Rhone-Alpes  Antwerpen  Out-Visanderen West-Visanderen Hessen Trentino Riedersachsen Nordrhein-Westfalen Rhenitand-Pfalz Baden Wuestenberg Bayern Saenben Sarafrand Brandeburg Macklenburg Vorponmern Sachsen Sachsen Sachsen Phemoniet-V D'Aosta Lugaria	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niedersachsen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg Macklenburg-Vorpommern Sachsen-Anhalt Thuringen Premonte-V D'Aosta Liguria	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Noed-hein-Westlalen Hessen Noed-hein-Westlalen Hessen Rheniland-Pfalz Baden Wuerttenberg Bayerm Saarland Brandeburg Macklenbury Vorponimern Sachsen Sachsen Sachsen Sachsen Sachsen Fernomer V. D'Aosta Ligaria Trestrino	Alentejo Aligarve  Aligarve  Aligarve  I Limburg  Loosa-Viaanderen  Niedersachsen  Nordrein-Westfallen  Hessen  Reenland-Pfalz  Baden Wuentemberg  Bayen  Bayen  Brandeburg  Macklenburg Vorpomm  Sachsen  Sachsen-Anhalt  Tournigen  C Utalona  Bayera  E Sachsen-Anhalt  Tournigen  C Utalona  Bayera  Bayera  Bayera  Brandeburg  C Balona  Reenland  Bayera  Bayera  Bayera  Brandeburg  C Balona  Bayera	SE 2 SE S
Breiagne Rhone-Alpes  Annewspen  Oost-Visanderen West-Visanderen Hessem Treutino Niedersachsen Nordnheis-Westfalen Rheinland-Pfalz Baden Wentenberg Bayern Santiand Brandeburg  Z.20.6  Macklenburg Vorpontmem Sachsen Sachsen Sachsen-Anhalt Thuringen Hemonier-V D'Aosta Liguria Liguria  Liguria  Liguria	Bretspie Rhope-Alpes  Antiverper Oos-Vlaanderen West-Vlaanderen Niedrachsen Nordrieni-Westfalen Hetesen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg MackLenburg-Vorpommern Sachsen Sachsen-Anhalt Thuringen Premonter-V D'Aosts Liguria Friul V G Friul V G	Breisgne Rhone-Alpes  Antiverpen Cost-Vlanderen West-Vlanderen West-Vlanderen Nordrhen-Westfalen Hessen Rhentland-Pfalz Baden Wuettenberg Bayerm Sarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen-Anhalt Thuringen Piemonter V. D'Aosta Ligaria Trostino Friul V G.	Alentejo Aligarve Limburg Limb	RE Z Z SE
Breagen Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trention Riedersachsen Nordrheir Westfalen Reinland-Pfalz Baden Woertenberg Bayern Sarstrad Brandeburg Wastelburg Wastelburg Brandeburg Sachsen Sachsen-Anhalt Thuringen Permonter-V O'Aosta Ligaria Frisii V G. Emilia Romagna	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niedrachen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wwettemberg Bayern Bayern Brenind Trentine Brandeburg Macklenburg Vorpommern Sachsen Sachsen-Anhalt Thurringen Fredmonter V D'Aosta Liguria Fridi V G Emitla Romagna	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen Noerfschen-Westallen Hessen Rheniland-Pfalz Baden Wuertternburg Bayern Barnind-Pfalz Barning-Pfalz Barnin	Alentejo Aligarve  Aligarve  Iniburg  Icons-Viaanderen  Icons-Viaa	FT 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breiagne Rhone-Alper  Annwerpen  L20.3  Oost-Visanderen West-Visanderen Hessem Trentino Riedersschsen L20.6  Nordrheis-Westfalen Rheinland-Pfalz Baden Weertenberg Bayern Saarland Brandeburg L20.7  Macklenburg Vorpommern Sachken Sachken Sachken Sachken Permonie-V O'Aosta Ligaria Doscanla	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Westfalen Hessen Sarland Trentino Brandeburg Macklenburg-Vorpommern Sachsen Sachsen-Anhalt Thuringen Fremonte-V D'Aosta Liguria Frituli V G Emilia Romagna Toscana	Breagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Nord-hoin-Westfalen Hessen Rhenfand-Pfalz Baden Wuettlenberg Bayern Sarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen-Anhalt Thuringen Piemonter V. D'Aosta Liguria Trostino Friult V G. Emilia Romagna Toosana	Alentejo Aligarve  Antwerpen Elimburg Goss-Viaanderen Niedersachsen Niedersachsen Niedersachsen Hessen Hessen Baden Wuentemberg Bayern Baden Wuentemberg Bayern Basen Anhalt Thurngen Casachsen-Anhalt Thurngen Casachsen Pais Vasco PiemonteeV D'Aosta Liguria	FT 2  SE 12  SE
Breiagen Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trentino Riedersachsen Nordrheir Westfalen Reinland-Pfalz Baden Woentenberg Bayern Sarriand Brandeburg Brandeburg Brandeburg Brandeburg Sachsen-Anhalt Thuringen Permonler+V D'Aosta Ligaria Frisii V G. Emilia Romagna Toscana Marche	Bretagne Rhooe-Alpes  Antwerper Oost-Vlaanderen West-Vlaanderen Niederscheid Niederscheid Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wwerttemberg Bayern Sarfmad Trentino Brandeburg Macklenburg Vorponmern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Fridit V C Emitia Romagna Toscana Marche	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlannderen West-Vlannderen West-Vlannderen Nordrhon-Westfalen Hessen Rheniland-Pfalz Baden Wuerttemberg Bayern Sarland Brandeburg Macklenburg Vorponumern Sachsen Sachsen Sachsen Flemonte-V. JY Aosta Liggria Trestino Findi V G. Emilia Romagna Toscana	Alentejo Aligarve  Antwerpen Limburg Goss-Viaanderen Ficoss-Viaanderen Ficoss-Viaanderen Ficoss-Viaanderen Ficoss-Vestfalen Hossen Gossen Bernderen Gossen Bayern Gossen G	88 2 2 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Bretagne Rhone-Alpes  Antwerpen  Out-Visanderen West-Visanderen Hessem Trentine Risdersachsen Nordrhein-Westfalen Rheinland-Pfala Baden Wuestenberg Bayern Sachsen Sachsen Sachsen Vorponmern Sachsen Franklich Franklich Thuringen Fremonier-V D'Aosta Ligaria Frisit V G Emlia Romagna Toscana Marche Umbris	Bretagne Rhooe-Alpes  Antwerper Oos-Vlaanderen West-Vlaanderen West-Vlaanderen Niedersachen Nordrhein-Westfalen Hessen Rheinland-Pfalz Baden Westfalen Hessen Saarland Trentino Brandeburg MacLlenburg Vorponmern Sachsen Sachsen-Anhalt Thuringen Premonte-V D'Aosta Liguria Fruil V G Emitia Romagna Toscana Marche Umbria	Breagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Noedrhoin-Westfalen Hessen Rhenfand-Pfalz Baden Wuerttemberg Bayern Saarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen-Anhalt Thuringen Piemonter V. D'Aosta Liguria Trostino Friuli V G. Emilia Romagna Toocana Marche Umbon	Alentejo Aligarve  Antwerpen Limburg Goss-Viaanderen Niedersachsen Nordrhein-Westfallen Hessen Hesse	FT 2  SE 2  SE 3
Breispen Rhome-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trentino Hiedersachsen Nordnheis-Westfalen Rheinland-Pfalz Baden Wentenberg Bayern Saarland Brandeburg Mackienburg-Vorpommem Sachbean Sachbean-Anhalt Thuringen Freinit V G Emilia Romagna Toseana Toseana Toseana Marche Umbris Limburg L220.15	Bretagne Rhooe-Alpes  Antwerper Oose-Vlaanderen West-Vlaanderen Niederscheiden Nordrhein-Wesfalen Hessen Rheinland-Pfalz Baden Wesftletberg Bayern Saarland Trentino Brandeburg Macklenburg Vorponmern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Friuli V G Emilia Romagna Toestana Marche Umbra Limburg 2,16,2	Breagne Rhone-Alpes  Antwerpen  Cost-Viannderen West-Viannderen West-Viannderen Nordrhein-Westfalen Hessen Rheniland-Pfalz Baden Wuerttenberg Bayern Sarland Brandeburg Macklenburg Vorponmern Sachsen Sachsen Sachsen Fiemonet V. D'Aosta Liguria Treasino Friudi V.G. Emilia Romagna Toscana Masche Limburg  2.7.3	Alentejo Aligarve  Limburg Lim	88 2 88 2 88 88 88 88 88 88 88 88 88 88 88 88 88
Bretagne Rhone-Alpes  Antwerpen  Dost-Visanderen West-Visanderen West-Visanderen Hessen Trentino Briedersachsen Nordrhein-Westfalen Reinland-Pfala Baden Westfalen Bayern Bayern Brandeburg Brandeburg Brandeburg Westfalen Sachsen Sachsen-Anhalt Thuringen Piemonier-V D'Aosta Ligaria Frisis V G Bmills Romagna Toseana Marche Umbrin Limburg Lombardia	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Niedersachsen Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuertiemberg Bayern Saarland Trentino Brandeburg Macklenburg Vorpommern Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Friul V G Ernitia Romagna Toscana Marche Umbra Limburg Cetaluna	Breagne Rhone-Alpes  Antwerpen  Onst-Vlannderen West-Vlannderen West-Vlannderen Nordrhein-Westfalen Hessen Rheniland-Pfalz Baden Wuettlenberg Bayern Saarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen Sachsen Sachsen Touringen Treatino Friuli V G. Emilia Romagna Toecana Marche Limburg  Land Limburg  Land Limburg  Land Land Limburg  Land Limburg  Land Land Limburg  Land Land Limburg  Land Land Land Land Land Land Land Lan	Alentejo Aligarve  Antwerpen Limburg Goss-Viaanderen Niedersachsen Nordrein-Westfalen Hessen Goss-Viaanderen Rheinland-Pfalz Baden Weentemberg Bayern Baden Weentemberg Bayern Saarland Grandeburg Macklenburg Vorpomn Sachsen Sachsen Castalona Navarra Pais Vasco Fiemonte+V D'Aostn Liguria Lombrdia Trenstino Veneto Friud V G	FT 2  SE 2  SE 3
Breispen Rhome-Alpes  Antwerpen  Oost-Visanderen West-Visanderen West-Visanderen Heises Trentino Friedrissellen Richindand-Frida Baden Wentenberg Bayern Saarland Brandeburg Vorpommem Sachien Sachien-Anhalt Thuringen Fremonier-V D'Aosta Ligaria Fresiti V G Emilia Romagna Toseana Toseana Toseana Limburg Lombarda	Bretagne Rhope-Alpes  Antwerper Oose-Vlaanderen West-Vlaanderen Niederscheiden Nordrhein-Wesfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg Macklenburg-Vorponmern Sachsen Sachsen-Anhalt Thuringen Tremonter-V D'Aosta Liguria Friuli V G Emilia Romagna Toscana Marche Umbra Marche Limburg Latitura Linburg Limburg Linburg Lin	Breagne Rhone-Alpes  Antwerpen  Cost-Viannderen West-Viannderen West-Viannderen Nordrhein-Westfalen Hessen Rheniland-Pfalz Baden Wuerttenberg Bayern Sardnand Brandeburg Macklenburg Vorponmern Sachsen Sachsen Sachsen Fiemonie V. D'Aosta Liguria Treasino Friudi V G. Emilia Romagna Toscana Marche Limburg Limburg Caraluna	Alentejo Aligarve Limburg Limb	85 2 85 2 85 85 85 85 85 85 85 85 85 85 85 85 85 8
Bretagne Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen West-Visanderen Hessem Trentine Briedersachsen Nordrheis-Westfalen Scheinland-Fris Bayern Brenning Brandschurg Brandschurg Brandschurg Brandschurg West-Nabil Thuringen Permonie+V Ö-Aosta Liguria Frisis V G Emilia Romagna Toscania Marche Umbris Limburg Lombarda Ventoo  Ctallunn  120.13	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niederschein Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg MacUenburg Vorposmern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Fridi V G Emilia Romagna Toscana Marche Umbria Limburg Limbur	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlannderen West-Vlannderen Ned-Vlannderen Nord-hein-Westlalen Hessen Rheniland-Pfalz Baden Wuerttenberg Bayern Saarland Barndeburg Macklenburg Vorponiniern Sachsen Sachsen Sachsen Sachsen Sachsen Thuringen Piemonter-V. D'Aosta Liguria Tressino Friudi V G. Emilia Romagna Toscana Marche Umbura Limburg Cataluna Navarra	Alentejo Aligarve  Antwerpen Limburg GOSH-Vilanderen FiloOsH-Vilanderen FiloOsH-Vestfalen FiloOsH-Vestfalen FiloSH-Vestfalen	88 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breiagen Rhone-Alpes  Anwerpen Local Visanderen West-Visanderen West-Visanderen Hessem Trentino Riedersachsen Ried	Bretagne Rhone-Alpes  Antwerper Oos-Vlaanderen West-Vlaanderen West-Vlaanderen Nordrhein-Westfalen Hetesen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg Macklenburg-VDAosta Trentino Sachsen-Anhalt Thuringen Premonter-VDAosta Liguria Friuli V G Emitia Romagna Toscana Marche Umbria Limburg cataluna Navera Pals Vesco	Bretagne Rhone-Alpes  Antiverper Cost-Vlanderen West-Vlanderen West-Vlanderen Nordrhein-Westfalen Hessen Rhenland-Pfalz Baden Wurettenberg Bayern Sarland Brandeburg Macklenburg Vorponimern Sachsen Sachsen Flemonter-V. D'Aosta Liguria Treatino Friuit V G. Emilia Romagna Toccana Marche Limburg L	Alentejo Aligarve Limburg Limb	85 2 85 2 85 85 85 85 85 85 85 85 85 85 85 85 85 8
Breagen Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Hessen Trention Riedersachsen Nordrheir Westfalen Rheinland-Pfalz Baden Woentenberg Bayern Sarstand Brandeburg Macklenburg Vorpommem Sachsen Sachsen-Anhalt Thuringen Permonler-V O'Aosta Ligaria Frisii V G. Emilia Romagna Toscania Marche Limburg Lombarda	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niederschein Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Werttemberg Bayern Bayern Brendeburg Macklenburg Vorpommern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Fruit V G Emitla Romagna Toscana Marche Limburg Limburg Antwerta Limburg Limburg Antwerta Limburg Limb	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlannderen West-Vlannderen Ned-Vlannderen Nord-hein-Westlalen Hessen Rheniland-Pfalz Baden Wuerttenberg Bayern Saarland Barndeburg Macklenburg Vorponiniern Sachsen Sachsen Sachsen Sachsen Sachsen Thuringen Piemonter-V. D'Aosta Liguria Tressino Friudi V G. Emilia Romagna Toscana Marche Umbura Limburg Cataluna Navarra	Alentejo Aligarve  Antwerpen Limburg Goss-Viaanderen Ficoss-Viaanderen Ficoss-Viaanderen Ficoss-Viaanderen Ficoss-Vestfalen Hessen Bayern Bayern Gadehurg Bayern Garainad Bayern Garainad Bayern Graatinad Firentejorg Grandeburg Macklenburg Crepomin Sachsen Sachsen Sachsen Sachsen Sachsen Cresoluna Firentejorg Graduna Firentejorg Cresoluna Firentejorg Firentejo	85 2 85 2 85 85 85 85 85 85 85 85 85 85 85 85 85 8
Breiagne Rhome-Alpes  Annwerpen  Oost-Visanderen West-Visanderen West-Visanderen Hessem Treutino Fliedersachsen Nordnhein-Westfalen Rheinland-Pfalz Baden Wentenberg Bayern Saarland Bernachsung Z-20-7 Macklenburg Vorpontmem Sachsen Sachsen Sachsen-Anhalt Thuringen Fliedersachsen Marche Umbris Liguria Marche Umbris Liguria Liguria Liguria Liguria Marche Liguria Liguria Liguria Marche Liguria Ligur	Bretagne Rhone-Alpes  Antwerpen Oosa-Visanderen West-Vlaanderen West-Vlaanderen Nordrhein-Westfalen Hiesen Rheinland-Pfalz Baden Wuerttemberg Bayern Saarland Trentino Brandeburg Macklenburg Vorpommen Sachsen Sachsen-Anhalt Thuringen Fremonier-V D'Aosta Liggiris Friuli V G Emilia Romagna Toesena Marche Umbria Linthurg Cantaluna Navarra Pals Vasco Lombardia Veneco Notre  2.16.15	Breisgne Brhone-Alpes  Antwerpen Cost-Vlanderen West-Vlanderen West-Vlanderen Nordrhein-Westfalen Hessen Rhenland-Pfalz Baden Worttenberg Bayern Sarland Brandeburg Macklenburg Vorponmern Secheen Secheen Secheen Flemonere V. D'Aosta Ligsria Trestino Friudi V. G. Emilia Romagna Toccana Marche Limburg Castiuna Navarra Pair Visco Lombardia Veneto Norte	Alentejo Aligarve Limburg Limb	FT 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Breispie Rhone-Alpes  Antwerpen  Oost-Visanderen West-Visanderen Heissen Trentine Niedersachsen Nordnkris-Westfalen Reinland-Pfalz Baden Weentenberg Bayern Sarsiard Brandeburg Macklenburg-Vorpommem Sachsen Sachsen-Anhalt Thuringen Permonter-V O'Aosta Ligaria Frisili V G. Emilia Romagna Tostana Marche Umbris Limburg Lombarda Venero Cetaluma 1230.11 Navarra Ligaria 1230.11 Navarra Ligaria 220.11 Ligaria 100.11	Bretagne Rhooe-Alpes  Antwerpen Oost-Vlaanderen West-Vlaanderen Niederschein Nodrhein-Westfalen Hessen Rheinland-Pfalz Baden Werttemberg Bayern Bayern Brendeburg Macklenburg Vorpommern Sachsen Sachsen-Anhalt Thuringen Premonter V D'Aosta Liguria Fruit V G Emitla Romagna Toscana Marche Limburg Limburg Antwerta Limburg Limburg Antwerta Limburg Limb	Bretagne Rhone-Alpes  Antwerpen  Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Noerd-hein-Westalien Hessen Rheniland-Pfalz Baden Wuertternberg Bayern Saarland Brandeburg Macklenburg Vorponumern Sachen Sachen Sachen Findi V Green Findi V G. Emilia Romagna Toscana Marche Umbron Cariatura Navarra Cariatura Caria	Alentejo Aligarve  Antwerpen Limburg GOSH-Vilanderen Ficons-Vilanderen Ficons-Vilanderen Ficons-Vilanderen Ficons-Vilanderen Ficons-Vestfalen Hossen Bayern Gaden Wuerttemberg Bayern Gaden Ga	85 2 85 2 85 85 85 85 85 85 85 85 85 85 85 85 85 8

## TABLE I

## Continued

CLUSTERS 20	CLUSTERS 16	CLUSTERS 7	CLUSTERS 4 (La	rger Clusters)
Schleswig-Holstein 3.20.5	Schleswig-Hold 3.16.5	Schleswig-Hol 3.7.4	Schleswig-Hols	DE 3
Berlin	Berlin	Berlin	Berlin	DE
Lisboa	IRELAND	TRELAND	IRELAND	IE
North-West	Lisboa	Lisboa	Groningen	NL
East Anglia	Scotland	Scotland	Friesland	NL
South East	North	North	Dranthe	NL
South West	Yorkshire e Humber	Yorkshire e Humber	Overijssel	NL
IRELAND (3.20.14)	North-West	North-West	Gelderland	NL
Scotland	East Midlands	East Midlands	Flevoland	NL
North	East Anglia	East Anglia	Utrecht	NL
Yorkshire e Humber	West Midlands	West Midlands	Noord-Holland	NL
East Midlands	Wales	Wales	Zuid-Holland	NL
West Midlands	South East	South East	Zecland	NL
Wales	South West	South West	Noord-Brabant	NL
Northern Ireland	Northern Ireland	Northern Ireland	Limburg	NL
Groningen (3,20,16)	Groningen 3.16.12	Groningen 3.7.7	Lisboa	PT
Friesland	Friesland	Friesland	Scotland	UK
Dranthe	Dranthe	Dranthe	North	UK
Overijssel	Overijssel	Overijssel	Yorkshire e Hu	UK
Gelderland	Gelderland	Gelderland	North-West	UK
Zeciand	Zeeland	Flevoland	East Midlands	UK
Noord-Brabant	Noord-Brabant	Utrecht	East Anglia	UK
Limburg	Limburg	Noord-Holland	West Midlands	UK
Flevoland 3.20.17	Flevoland 3.16.13	Zuid-Holland	Wales	UK
Utrecht [3,20,18]	Utrecht	Zeeland	South East	UK
Noord-Holland	Noord-Holland	Noord-Brabant	South West	UΚ
Zuid-Holland	Zuid-Holland	Limburg	Northern Irelan	UK
Andalusia 4.20.8	Andalusia 4.16.7	Andalusia 4.7.5	Andalusia	ES 1
Extremadura	Extremadura	Aragon	Extremadura	ES
Molise e Abruzzi	Molise e Abruzzi	Asturias	Asturias	ES
Campania	Campania	Cantabria	Cantabria	ES
Puglis	Puglia	Castilla leon	Castilla leon	ES
Basilicata	Basilicata	Castilla la mancha	Castilla la mans	ES
Calabria	Calabria	Extremadura	Extremadura	ES
Sicilia	Sicilia	Galicia	Galicia	ES
Sardegna	Sardegna	Murcia	Murcia	ES
Acores	Acores	La Rioja	La Rioja	ES
Aragon 4.20.9	Aragon 4.16.8	Pais Valenciano	Pais Valenciano	ES
Asturias	Asturias	Molise e Abruzzi	Molise e Abruz	IT
Cantabria	Cantabria	Campania	Campania	IT
Castilla leon	Castilla leon	Puglia	Puglia	IT
Castilla la mancha	Castilla la mancha	Basilicata	Basilicata	IT .
Galicia	Galicia	Calabria	Calabria	IT
Murcia	Murcia	Sicilia	Sicilia	IT }
La Rioja	La Rioja	Sardegna	Sardeyna	IT
Pais Valenciano	Pais Valenciano	Acores	Acores	PT

The first number is referred to the larger cluster, the second is referred to the cut of the clustering tree, the third is referred to the cluster number.

TABLE II
Objective indicators: cluster related averages at the different aggregation levels

														7	50.07	64.08	12.85	25.56	11.89	15.01	69.33	32.00	56.00	27.48	36.23
														9	54.39	66.63	31.97	15.75	60.30	21.59	44.50	54.85	64.91	76.18	36.37
													:	5	67.91	85.60	65.40	60.52	75.30	50.20	58.37	66.35	78.04	22.87	40.77
	4	67.91	85.60	65.40	60.52	75.30	50.20	58.37	66.35	78.04	22.87	40.77	7 Clusters	4	57.35	69.41	17.42	7.91	47.96	10.79	52.27	41.09	73.47	27.83	64.57
sters	3	54.12	67.04	15.39	15.75	31.93	12.66	59.85	37.05	65.71	27.67	51.97		3	67.28	72.75	28.65	39.52	72.60	27.50	18.25	78.28	64.27	19.98	37.48
4 Clusters	2	72.81	64.74	22.95	34.18	68.80	18.62	28.52	64.16	48.56	36.63	61.62		2	74.98	61.60	20.71	32.09	67.32	15.14	32.53	58.64	42.42	43.14	71.07
	-	60.39	61.63	33.06	20.77	59.56	19.27	62.79	39.86	58.41	63.45	46.26		_	63.64	58.92	33.65	23.49	59.16	18.01	72.70	31.74	54.89	56.56	51.61
	Indicators	DEM	ECO	220	SEX	SAN	AGR	QN N	TER	AUTO	SUI	AMB		Indicators	DEM	ECO	220	SEX	SAN	AGR	ONI	TER	AUTO	SUI	AMB

TABLE II Continued

														20	75.23	89.53	22.23	91.93	90.66	10.03	33.68	10.60	6.23	70.21	15.82
														19	1				82.13	-					
														18	55.06	55.41	68.6	18.03	7.61	8.97	92.71	10.53	48.27	31.15	35.80
														17	0.00	80.41	7.51	18.07	43.20	25.91	76.06	24.56	0.00	20.32	0.00
	16	75.23	89.53	22.23	26.16	90.66	40.03	83.68	40.60	76.23	70.21	75.82		16	54.46	65.29	14.63	29.31	9.59	15.91	57.86	40.98	68.89	26.99	40.92
	15	56.29	95.27	4.70	18.42	82.13	55.04	29.75	90.73	78.07	60.9	42.38		15	90.29	55.79	25.75	47.76	76.01	21.03	38.84	58.50	33.09	31.64	77.82
	14	55.06	55.41	68.6	18.03	7.61	8.97	92.71	10.53	48.27	31.15	35.80		14	55.45	73.14	21.57	7.13	45.93	12.75	45.01	47.81	83.92	24.87	62.91
	13	0.00	80.41	7.51	18.07	43.20	25.91	76.06	24.56	0.00	20.32	0.00		13	71.59	71.62	34.29	12.59	51.31	35.42	67.15	48.87	58.52	71.44	54.66
	12	54.46	65.29	14.63	29.31	9.59	15.91	57.86	40.98	68.59	26.99	40.92		12	54.39	66.63	31.97	15.75	60.30	21.59	44.50	54.85	64.91	76.18	36.37
	Ξ	90.29	55.79	25.75	47.76	76.01	21.03	38.84	58.50	33.09	31.64	77.82	20 Clusters	=	76.61	70.50	60.79	48.06	59.53	14.18	15.74	69.92	71.84	24.36	29.95
	10	54.39	66.63	31.97	15.75	60.30	21.59	44.50	54.85	64.91	76.18	36.37	20 CI	01	61.28	67.06	56.83	44.72	66.72	13.62	76.39	25.75	53.80	15.09	28.34
16 Clusters	6	61.28	67.06	56.83	44.72	66.72	13.62	76.39	25.75	53.80	15.09	28.34		6	78.47	83.33	65.77	52.51	69.52	50.42	46.33	75.22	85.70	27.00	41.56
16 C	∞	78.47	83.33	65.77	52.51	69.52	50.42	46.33	75.22	85.70	27.00	41.56		∞	58.41	87.64	65.07	67.74	80.51	50.00	69.20	58.37	71.14	19.16	40.06
	7	58.41	87.64	65.07	67.74	80.51	50.00	69.20	58.37	71.14	19.16	40.06		7	79.73	91.76	31.68	20.02	65.67	14.75	29.65	60.40	61.27	58.64	82.10
	9	79.73	91.76	31.68	20.02	65.67	14.75	29.65	60.40	61.27	58.64	82.10		9	62.28	56.19	10.81	22.54	58.69	10.47	18.58	65.20	35.50	43.59	68.62
ļ	5	57.35	69.41	17.42	7.91	47.96	10.79	52.27	41.09	73.47	27.83	64.57		5	59.53	65.15	12.67	8.80	50.27	8.54	60.57	33.40	61.53	31.21	66.46
	4	63.50	71.17	35.78	20.47	56.74	22.13	70.52	36.37	56.86	96.79	52.18		4	57.72	70.85	36.84	26.10	60.62	12.64	72.92	27.45	55.67	65.47	50.41
	3	72.77	61.49	40.62	50.07	67.84	13.73	12.50	72.05	57.37	26.93	35.03		3	68.94	52.48	20.45	52.09	76.14	13.29	9.26	74.19	42.89	29.50	40.12
ŀ	7	63.08	51.60	12.53	27.61	62.54	11.57	29.83	57.92	39.78	43.42	61.77		2	64.03	46.08	14.59	33.69	67.15	12.89	43.33	49.17	44.91	43.21	53.54
	-	61.65	18.81	17.75	14.49	45.65	5.37	70.95	23.52	44.57	56.86	57.93	:	1	61.65	18.81	17.75	14.49	45.65	5.37	70.95	23.52	44.57	56.86	57.93
:	Indicators	DEM	ECO	220	SEX	SAN	AGR	ONI	TER	AUTO	SUI	AMB		Indicators	DEM	ECO	သ	SEX	SAN	AGR	N N	TER	AUTO	SUI	AMB

TABLE III

Subjective indicators: cutting the culstering tree at the different levels (20-16-8-4)

CLUSTERS 20	CLUSTERS 16	CLUSTERS \$	CLUSTERS 4 (Larger Charles )
Schleswig-Hoistein 1,20,1	Schleswig-Holstein	Schleswig-Holstein	Schleswig-Holstein 1
Friesland	Saurland	Niedersachsen	Hambura
Drenthe	Groningen	Nordrhein-Westfale	Niedersachsen
Overissel	Friesland	Hessen	Bremen
Gelderland	Drenthe	Baden Wuerttemberg	Nordrhein-Westfale
Flevoland	Overijssel	Searland	Hessen
Noord-Brabant	Gelderland	Aquitaine	Baden Wuerttemberg
Limburg	Flevoland	Midi-Pyrénees	Sastland
Utrecht	Noord-Brabant	Provence-Alpes-Cor	Berlin
Noord-Holland	Limburg	Groningen	lle de France
Zuid-Holland	Utrecht	Friesland	Alsace
Saarland 1 20.5	Noord-Holland	Dremhe	Pays de la Loire
Groningen	Zuid-Holfand	Overijssel	Bretagne
DANMARK	DANMARK	Gelderland	Poisou-Charences
Niedersachsen 1 20.3	Niedersechsen	Flevoland	Aquitaine
Nordrhein-Westfale	Nordthein-Westfale	Noord-Brabant	Midi-Pyrénées
Hessen	Hessen	Limburg	Rhone-Alpes
Baden Wuerttemberg	Baden Wuerttemberg	Utrecht	Languedoc-Roussill
Aquitaine Midi-Pyrénées	Aquitaine Midi-Pyrésées	Noord-Holland Zuid-Holland	Provence-Alpes-Cox Groningen
Provence-Alpes-Cot	Provence-Alpes-Cot	DANMARK	Friesland
Hamburg 1 20 2	Hamburg	Hamburg	Drenibe
Bremen	Bremen	Bremen	Overissel
Pays de la Loire	Berlin	Berlin	Gelderland
Berlin 1.20.6	Re de France	ile de France	Flevoland
Be de France	Alsace	Alsace	Noord-Brabant
Alsace	Pays de la Loire	Pays de la Loire	Limbure
Bretagne	Bretayne	Bretagne	Utrechs
Poitou-Charentes	Poison-Charentes	Portou-Charentes	Noord-Holland
Rhone-Alpes	Rhone-Alpes	Rhone-Alpes	Zuid-Holland
Languedoc-Roussill	Languedoc-Roussill	Languedoc-Roussill	Bruxelles
Bruxelles	Bruxelles	Bruxelles	DANMARK
Rheinland-Pfalz 2 20 4	Rheinland-Pfalz	Rheinland-Pfalz	Rheinland-Pfalz 2
Bayem	Bayern	Bayern	Bayern
Bayern Franche-Complé	Bayern Franche-Compté	Bayern Franche-Compté	Bayern Franche-Compté
Bayern Franche-Compté Brabant (Wallon+Vlaams)	Bayern Franche-Compté Brabant (Wallon+Vlaams)	Bayern Franche-Compté Вгабан (Wallon+Vlaants)	Bayern Franche-Compté Lombardia
Bayem Franche-Compté Brabant (Wallon+Visams) Antwerpen Limburg Oost-Visanderen	Bayern Franche-Compté Brabaet (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen	Bayern Franche-Compté Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen	Bayern Franche-Compté Lombardia Emilia Romagna Lazio Campania
Bayern Franche-Complé Brabani (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen	Bayern Franche-Compte Brahant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen	Bayern Franche-Compté Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen	Bayern Franche-Compte Lombardia Emilia Romagna Lazio Cempania Plemonte+V D'Aosta
Bayern Franche-Complé Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur	Bayern Franche-Compte Brabat (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur	Bayern Franche-Compte Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor	Bayern Franche-Compté Londbardir Emilia Romagna Lazio Cumpania Plemonte-V D'Aosta Liguria
Bayern Franche-Complé Brashant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Nest-Vlaanderen LUSSEMBURGO	Bayern Franche-Compté Brabant (Wallon+ Vlaams) Antwerpen Limburg Ooss- Vlaanderen West-Vlaanderen Namur LUSSEMBURGO	Bayern Franche-Compré Brabant (Wallon + Vlaants) Antwerpen Limburg Oods-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO	Bayem Franche-Compté Lombardus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Ligaria Trestino
Bayen Franche-Compté Brabani (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND   2 20 17	Bayern Franche-Compré Brabast (Wallon+ Vlaams) Antwerpen Limburg Ocu: Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND	Bayern Frinche-Compré Braban (Wallon* Vlaams) Antwerpen Lumburg Oosi-Vlanderen Wes-Vlanderen Nemorin LUSSEMBURGO WORTHERN IRELAND	Bayern Franche-Compté Lorobardir Emilia Romagna Lazio Cempania Plemonte+V D'Aosta Liguria Trentino Vendo
Bayern Franche-Compté Brabant (Wallon+Vlaams) Antwerpen Limburg Usost-Vlaanderen West-Vlaanderen West-Vlaanderen USSEMBURGO NORTHERN IRELAND  2 20 17 IRELAND  2 20 17 IRELAND	Bayern Franche-Compte Brabast (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Wast-Vlaanderen LLSSEMBURGO NORTHERN IRELAND IRELAND	Bayern Franche-Compre Braban (Wallon' Vlaams) Antwerpen Lumburg Oosi-Vlaamderen West-Vlaamderen Namme LUSSEMBURGO NORTHERN IRELAND IRELAND	Bayern Franche-Compté Lorobardir Emilia Romagna Lazio Cumpania Plemonte-V D'Aosta Liguria Trestino Veneto Fruit V G
Bayern Franche-Compté Brahani (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur USSEMBURGO NORTHERN IRELAND 2 200 17 IRELAND	Bayern Franche-Compté Strabatt (Walton+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND	Bayern Frache-Compté Braban (Wallon*Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wers-Vlaanderen Namer LUSSEMBURGO MORTHERN IRELAND IRELAND NAMER	Bayern Franche-Compté Londoudre Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Liguria Trentino Veneto Friuli V G Toscana
Bayen Franche-Compté Brabani (Wallon+Vlaams) Antwerpen Lümburg Oost-Vlaanderen West-Vlaanderen ULSSEMBURGO NORTHERN IRELAND 2 20 17	Bayern Frische-Compté Brabast (Wallon+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LINSFMBURGO NORTHERN IRELAND IRELAND Navara	Bayern Franche-Compré Braban (Wallon' Vlaams) Antwerpen Lumburg Osta-Vlaanderen West-Vlaanderen Nemme LUSSEMBURGO NORTHERN IRELAND IRELAND JEWARTS Lombardis	Bayern Franche-Compté Lorobardir Emilia Romagna Lazio Cempania Plemonte+V D'Aosta Liguria Trentino Veneto Fruit V G Toscana Umbna
Bayern Franche-Compté Brahant (Walken+Vlasms) Antwerpen Limburg Oost-Vlasmderen West-Vlasnderen Namur LISSEMBURGO NORTHERN IRELAND 2 290 17 IRELAND NAVUTS Lombardia 2,20 11	Bayern Franche-Compré Franche-Compré Brabast (Wallon+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namu LUSSEMBURGO NORTHERN IRELAND NAVERA Lombardis Emilia Romagna	Bayern Frische-Compré Braban (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlaanderen West-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND RELAND NEVARIA Lombardia Lombardia Lombardia	Bayern Franche-Compté Lombardus Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Liguria Trestino Veneto Fruit V G Toscana Umbria Marche
Bayen Franche-Compté Brabani (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen Namur LUSSEMBURGO NORTHERN IBELAND 1 2 20 17 IRELAND Navarra Lombardia 1 20 11 Emilia Romagna Lazio	Bayern Franche-Compté Brabati (Wallon+Vlaams) Antwerpen Limburg Qosa-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND IRELAND Navurs Lombardis Emilia Romagna Lazio	Bayern Frache-Compré Braban (Wallon+Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wets-Vlaanderen Nemm LUSSEMBURGO WORTHERN IRELAND IRELAND NAvarra Lombardia Emilia Romagna Luzio	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Campania Piemonte-V D'Aosta Ligaria Trestino Venero Friuli V G Toscana Umbria Marche Puglia
Bayern Franche-Compté Brabant (Walken+Vlasms) Antwerpen Limburg Oost-Vlasmderen West-Vlasnderen Namur LISSEMBURGO NORTHERN IRELAND 2 290 17 IRELAND NANUTS Lombardia 2 200 11 Emilia Romagna Lazio Piemonte+V D'Aosta	Bayern Franche-Compré Franche-Compré Brabast (Wallon+ Vlaams) Antwerpen Limburg Oost-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND RAELAND HAVETA Lombardia Emilia Romagna Lazio Campania	Bayern Frische-Compré Britain (Wallon* Vlaums) Antwerpen Lumburg Osta-Vlaunderen West-Vlaunderen Namm* LUSSEMBURGIO NORTHERN IRELAND IRELAND Stevarra Lombardia Emilia Rennagna Lazio Campania	Bayern Franche-Compté Lombardus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Ligaria Trestino Veneto Fruit V G Toscana Umbria Marche Puglia Basilicata
Bayen Franche-Compté Brabani (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen Namur LUSSEMBURGO NORTHERN IBELAND 1 2 20 17 IRELAND Navarra Lombardia 1 20 11 Emilia Romagna Lazio	Bayern Franche-Compté Brabati (Wallon+Vlaams) Antwerpen Limburg Qosa-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND IRELAND Navurs Lombardis Emilia Romagna Lazio	Bayern Frache-Compré Braban (Wallon+Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wets-Vlaanderen Nemm LUSSEMBURGO WORTHERN IRELAND IRELAND NAvarra Lombardia Emilia Romagna Luzio	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Campania Piemonte-V D'Aosta Ligaria Trestino Venero Friuli V G Toscana Umbria Marche Puglia
Bayern Franche-Compté Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND 1 2 20 17 IRELAND Navarra Lombardis Emilia Romagna Lazio Premonte+V D'Aosta Liguria Trentino Venedo	Bayern Franche-Compté Brabat (Wallon+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND IRELAND Navurs Lomburdis Emilia Romagna Lazio Campania	Bayern Frache-Compré Braban (Wallon Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wets-Vlaanderen Namur LUSSEMBURGO PORTHERN IRELAND IRELAND NAVARTA Lombardia Emilia Romagna Lazio Canagania Pirmontert V D'Aosta	Bayern Franche-Compté Lorobardir Emilia Romagna Lazio Campania Plemonte+V D'Aosta Liguria Trentino Veneto Fruit V G Toscana Umbria Marche Puglia Basticata Sicilia Sardeppa
Bayern Franche-Compté Brabani (Wellon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen West-Vlaanderen ULSSEMBURGO NORTHERN IRELAND 2 2 20 17 IRELAND Norvira Lombardis Emilia Romagna Lazio Plemonte+V D'Aosta Liguria Terettino Venedo Venedo	Bayern Frische-Compté Brabast (Wallon* Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LINSSFMBURGO NORTHERN IRELAND IRELAND Navers Lembardia Emilia Romagna Lazio Campania Pienomer V D'Aosta Liguria Tremino Venedo	Bayern Franche-Compré Braban (Wallon* Vlaams) Antwerpen Lumburg Osat-Vlanderen Wesz-Vlaanderen Nemme LUSSEMBURGO NORTHERN IRELAND IRELAND Neuers Lombardia Emilia Romagna Lazio Campania Premonter V D'Aosia Liguria Trection	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Ligaria Tromino Veneto Friuli V G Toscana Umbria Marche Puglia Basilicata Sicilia
Bayern Franche-Compté Brobant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaamderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND PAVAUR Lombardia Emilia Romagna Lazio Piemonte+V D'Aosta Liguria Trentino Venedo Fridi V G	Bayern Franche-Compté Franche-Compté Strabat (Walton+ Vitaams) Antwerpen Limburg Oost-Vitanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND Navarra Lombardia Emilia Romagna Lazio C ampania Ligoria Tremino Vened Vendo Fruit V C	Bayern Franche-Compré Brabant (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wets-Vlaanderen Name* LUSSEMBURGO MORTHERN IRELAND IRELAND SANATE Lombardia Emilita Romagna Lario Campania Uranter V D'Aosta Liguria Trestina Veneto Fruit V G	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Liguria Trentino Veneto Friuli V G Toscana Umbria Marche Poglia Basilicata Sicilia Sardegna Brabant (Walloo+Vlaams) Antwerpen Limburg
Bayern Franche-Compté Brokent (Walken+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND 2 29 17 IRELAND Novura Lonbardis 2 20 11 Ermila Romana Lazio Premonte+V D'Aosta Liguria Troettino Venedo Findii V G Toocana	Bayern Franche-Compré Franche-Compré Brabant (Wallon+ Vlaams) Antwerpen Limburg Qoux-Vlaanderen Wess-Vlaanderen Namor NAMORTHERN IRELAND IRELAND NAWARTA Lusio Emilia Romagna Lusio Campania Fremonet-V D'Aosta Liguria Tremino Venedo Fruit V G' Toscana	Bayern Frache-Congré Braban (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlanderen West-Vlaanderen Mest-Vlaanderen LUSSEMBURGO MORTHERN IRELAND IRELAND Naturia Lombardia Emilia Romagna Lazio Cangania Picmontel V D'Aosia Liguria Trentino Veneto Fruii V G Toscana	Bayern Franche-Compté Lordobardir Emilia Romagna Lazio Campania Plemonte+V D'Aosta Ligoria Trestino Veneto Friuli V G Toscana Umbria Merche Puglia Basilicata Sicilia Sardegne Brabant (Wallon+Vlaams) Antwepen Limburg Oost-Vlaanden
Bayern Franche-Compté Brobant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND   2.20 17 IRELAND Navarra Lombardia   2.20 11 Limburg Temilia Romagna Lazio Piemonste-V D'Aosta Liguria Trestino Venedo Fridi V G Toccaria Marche Canariss	Bayern Franche-Compté Franche-Compté Strabatt (Walton+ Vitaams) Antwerpen Limburg Oost-Vitanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND Navarra Lombardia Emilia Romagna Lazio Campania Frentonier V D'Aosta Liguria Trentino Veneo Fruit V G Toscana	Bayern Franche-Compré Brabant (Wallon* Vlaams) Antwerpen Lomburg Out-Vlaanderen Wets-Vlaanderen Wets-Vlaanderen LUSSEMBURGO MORTHERN IRELAND IRELAND SANAMT Lombardia Emilita Romagna Lario Campania Lombardia Trentino Veneto Fruiti V G Toccana Umbria	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Ligoria Trentino Veneto Friuli V G Toscana Umbria Marche Puglia Bastilicata Sicilia Sandegna Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen
Bayen Franche-Compté Brahan (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND ROPATHERN IRELAND ROPATHERN IRELAND Lazio Premonte-V D'Aosta Liguria Trentino Veneto Fruil V G Toccana Marche Canaries Castilia leon	Bayern Franche-Compré Franche-Compré Brabant (Wallon+ Vlaams) Antwerpen Limburg Ocs. Vlaanderen West-Vlaanderen Namur Namur Namur NORTHERN IRELAND Navura Lazio Campania Prémonter V D'Aosta Liguria Tremino Vened Fruit V G Toscana Umbria Marche	Bayern Frache-Congré Braban (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlanderen West-Vlanderen Nemme LUSSEMBURGO NORTHERN IRELAND IRELAND Navarra Lombardia Emilia Romagna Luzio Campania Premonter V D'Aosta Liguria Treziono Veneco Finili V G Toccana Umbiria Marche	Bayern Franche-Compté Lovisbardira Emilia Romagna Lazio Campania Plemonte+V D'Aosta Ligoria Trestino Veneto Friuli V G Toscana Umbria Marche Puglia Basificata Sisilia Sardegpa Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen West-Vlaanderen West-Vlaanderen Nemur
Bayern Franche-Compté Brobant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND 2 20-17 RELAND Novura Lombardia 2, 20-11 Emilia Romagna Lazio Fremite V D'Aosia Liguria Trontino Veneto Fredi V G Tooscana Marche Cassifia Icon Extremedura	Bayern Franche-Compté Franche-Compté Brabast (Walton+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND Navura Lombardia Emilia Ronagna Lazio Campania Plenomice V D'Aosta Liguna Tremino Veneo Fruit V G Toscasa Umbria Marche Pugis	Bayern Franche-Compré Brabant (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wess-Vlaanderen Namm* LUSSEMBURGO MORTHERN IRELAND IRELAND Stavarra Lombardia Emilia Romagna Lutio Campania Premontet V D'Aosia Ligieria Trestino Venen Fruili V G Totcana Umbris Marche Pruglia	Bayern Franche-Compté Londoudre Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Ligaria Trentino Venero Fruli V G Toscana Umbria Marche Puglia Bastilicata Sicilia Sardegna Brabant (Wallon+Vlaams) Antwerpen Limburg Oos-Vlaanderen West-Vlaanderen Nemur LUSSEMBURGO
Bayern Franche-Compté Brabant (Wellon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND 12 20 17 IRELAND Navarra Lombardis Emilia Romagna Lazio Premonte+V D'Aosta Liguria Tcestino Veneto Fridi V G Toosarna Marche Cananias Lompardis Locastilia leon Extremodura Locastilia leon Extremodura Locamparia Locamparia Locastilia leon Extremodura Locamparia Loca	Bayern Franche-Compté Brabat (Wallon+Vlaams) Antwerpen Limburg Qosa-Vlaanderen West-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND Navurs Lomburdis Emilia Romagna Lazio Campania Piemoniter V D'Aosta Liguria Trentino Veneto Friuli V G Toscana Umbria Marche Pogija Basiltenta	Bayern Frache-Compré Braban (Wallon* Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wess Vlaanderen Name LUSSEMBURGO NORTHERN IRELAND IRELAND NAVARTA Lombardia Emilia Romagna Lazio Campania Premonere V D'Aosta Liguria Trestino Veneco Prudi V G Toscana Umbardia Basilicata	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Piemonte-V D'Aosta Ligaria Tromino Veneto Friuli V G Toscana Umbria Marche Puglia Basilicata Sicilia Sardegna Barbant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen West-Vlaanderen West-Vlaanderen Vest-Vlaanderen Vest-Vla
Bayern Franche-Compté Brobant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND 2 20-17 RELAND Novura Lombardia 2, 20-11 Emilia Romagna Lazio Fremite V D'Aosia Liguria Trontino Veneto Fredi V G Tooscana Marche Cassifia Icon Extremedura	Bayern Franche-Compté Franche-Compté Brabast (Walton+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND IRELAND Navera Lombardia Emilia Romagna Lazio Campania Piernoute-V D'Aosta Liguria Tremino Venedo Friuli V G Toscana Umbria Marche Puglia Basilicata Sicilia	Bayern Franche-Compré Braban (Wallon Vizams) Antwerpen Lumburg Osat-Vizanderen West-Vizanderen Namor LUSSEMBURGO MORTHERN IRELAND IRELAND SAVANTA Lombardia Emilia Rontagna LATIO Campania Premonter V D'Aosta Ligaria Treolino Veneto Friuli V G Totecna Umbria Marche Puglia Basilicata Sicilia	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Liguria Trestino Veneto Fruit: V G Toscana Umbria Marche Puglia Basilicata Sicilia Sardegna Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Nemur LUSSEMBURGO NORTHERN IRELAND IRELAND
Bayern Franche-Compté Brohant (Wallon+Vlasms) Antwerpen Limburg Oost-Vlasméern West-Vlasnderen Namur LUSSEMBURGO NORTHERN IRELAND 2 20-17 RELAND Novurs Lombardia Emilia Romagna Lazio Freminia Romagna Lazio Freminia Torentino Veneto Frendi V G Torectana Marche Cassifia ison Esteromadora Cassifia ison Esteromadora Cassifia ison Esteromadora Campania 2 20-12	Bayern Franche-Compté Franche-Compté Brabatt (Wallon+Vlaams) Antwerpen Limburg Ocst-Vlaanderen West-Vlaanderen Namor LUSSEMBURGO NORTHERN IRELAND IRELAND NAVATR Lombardis Emilia Romagna Lazio Campania Piemoniter-V D'Aosta Liguria Trenitino Veneto Friuli V G Toscana Umbria Marche Puglia Basilicata Sicilia Sardeynus	Bayern Franche-Compré Braban (Wallon Vlaams) Antwerpen Lumburg Oost-Vlaanderen Wess Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND IRELAND NAvarra Lomburdia Emilia Romagna Lazio Campania Premonter V D'Aosta Liguria Trestino Veneto Fruili V G Toscana Umbris Marche Pugita Basilicata Sicilia Sardegas	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Ligaria Trentino Veneto Fruit V G Toscana Umbria Marche Poglia Basticata Sicilia Sardegna Brebant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen Neste: Vlaanderen
Bayern Franche-Compté Brahan (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namur LUSSEMBURGO NORTHERN IRELAND PRAVITA Loribardia Lazio Premonte+V D'Aosta Lizio Premonte+V D'Aosta Lizio Premonte+V D'Aosta Lizio Fridi V G Toocana Marche Casarias Castila Icon Extremadura Campatia Lizio Product Product Ligin'a Lizio Ligi	Bayern Franche-Compté Franche-Compté Brabast (Walton+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHERN IRELAND IRELAND Navera Lombardia Emilia Romagna Lazio Campania Piernoute-V D'Aosta Liguria Tremino Venedo Friuli V G Toscana Umbria Marche Puglia Basilicata Sicilia	Bayern Franche-Compré Braban (Wallon Vizams) Antwerpen Lumburg Osat-Vizanderen West-Vizanderen Namor LUSSEMBURGO MORTHERN IRELAND IRELAND SAVANTA Lombardia Emilia Rontagna LATIO Campania Premonter V D'Aosta Ligaria Treolino Veneto Friuli V G Totecna Umbria Marche Puglia Basilicata Sicilia	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Liguria Trestino Veneto Fruit: V G Toscana Umbria Marche Puglia Basilicata Sicilia Sardegna Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Nemur LUSSEMBURGO NORTHERN IRELAND IRELAND
Bayern Franche-Compté Brohant (Walkon+Vlasms) Antwerpen Limburg Oost-Vlasmderen West-Vlasmderen West-Vlasmderen Namur LUSSEMBURGO NORTHERN IRELAND 220-17 IRELAND Novarra Lombardia 2, 20-11 Ireniha Romanna Lazio Piemontet-V D'Aosta Liguria Liguria Trentino Veneto Frindi V G Toescana Marche Castilia leo Esterenadora Campinia leo Esterenadora Camparia Lymbria	Bayern Franche-Compté Franche-Compté Brabast (Walton+ Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Namor LUSSFMBURGO NORTHEN IRELAND IRELAND Navera Lombardia Emilia Romagna Lazio Campania Piemoute-V D'Aosta Liguria Tremino Venedo Friell V C Toccana Umbria Marche Puglia Basilicata Sicilia Sardegua Canarias	Bayern Franche-Compré Braban (Wallon Vizams) Antwerpen Lumburg Osat-Vizanderen West-Vizanderen Namor LUSSEMBURGO MORTHERN IRELAND IRELAND Zitavaria Lombardia Emilia Romagnia Lazio Campania Piemonter V D'Aosta Liparia Treziono Venede Friuli V G Totcana Umbria Basilicata Sicidia	Bayern Franche-Compté Londoudus Emilia Romagna Lazio Cempania Plemonte-V D'Aosta Liguria Trestino Veneto Fruit: V G Toscana Umbria Marche Puglia Basilicata Sicilia Sardegna Brabant (Wallon+Vlaams) Antwerpen Limburg Oost-Vlaanderen West-Vlaanderen Nemur LUSSEMBURGO MORTHERN IRELAND CRaanas Navarra

# TABLE III

#### Continued

CLUSTER 20	CLUSTER 16	CLUSTER 8	CLUSTERS 4 (Larger Chisters)
Brandeburg 3.20.7	Brandeburg	Brandeburg	Brandeburg 3
Macklenburg Vorpom	Mackienburg Vorpom	Macklenburg Vorpom	Macklenburg Vorpom
Sachsen	Sachsen	Sachsen	Sachsen
Sachsen-Anhalt	Sachsen-Anhalt	Sachsen-Anhalt	Sachsen-Anhalt
Thuringen	Thuringen	Thuringen	Thuringen
Nord-pas de Calais 3.20.8	Nord-pas de Calais	Nord-pas de Calais	Nord-pas de Calais
Picardie	Picardie	Picardie	Picardie
Haute-Normandie	Haute-Normandie	Haute-Normandie	Haute-Normandie
Basse-Normandie	Basse-Normandie	Basse-Normandie	Basse-Normandie
Lorraine	Lonaine	Lorraine	Lorraine
Auvergne	Auvergne	Auvergne	Auvergne
Hainaut	Hainaut	Hainaut	Zeeland
Liege	Liego	Liege	Hainaut
Zeeland 3.20.15	Zeeland	Zeeland	Liege
Yorkshire Humber	Yorkshire Humber	North	North
East Midlands	East Midlands	Yorkshire Humber	Yorkshire Humber
East Anglia	East Anglia	East Midlands	East Midlands
South-East	South-East	East Anglia	East Anglia
South-West	South-West	South-East	South-East
West Midlands	West Midlands	South-West	South-West
North-West	North-West	West Midlands	West Midlands
Balcares	Baleares	North-West	North-West
North 3 20 16	North	Wales	Wales
Wales	Wales	Scotland	Scotland
Scotland	Scotland	Baleares	Baleares
Champagne-Ardenne 4.20 9	Champagne-Ardenne	Champagne-Ardenne	Champagne-Ardenne 4
Centre	Centre	Centre	Centre
Bourgoune	Bourgogne	Bourgogne	Bourgogne
Asturias	Asturias	Limousin	Limousin
Cantabria	cantabria	Calabria	Molise e Abruzzi
Pais Vasco	Pais Vasco	Madrid	Calabria
Aragon	Aragon	Galicia	Luxembourg
Cataluna	Cataluna	Asturias	Madrid
Limousin 4.20.10	Limousin	Cantabria	Galicia
Calabria	Calabria	País Vasco	Asturias
Madeira	Madeira	Aragon	cantabria
Madrid [4.20.18]	Madrid	Castilla la mancha	Pais Vasco
Galicia	Galicia	Cataluna	Rioja
Castilla la mancha	Castilla la mancha	Pais Valenciano	Aragon
Pais Valenciano	Pais Valenciano	Andalusia	Castilla la mancha
Andalusia	Andalusia	Murcia	Cataluna
Murcia	Murcia	Maderra	Pars Valenciano
Lisbon	Lisboa	Lisboa	Andalusia
Molise e Abruzzi 4.20.13	Molise e Abruzzi	Molise e Abruzzi	Murcia
Luxembourg	Luxembourg	Luxembourg	Acores
Rioja 4 20.19	Rioja	Rìoja	Madeira
Acores 4.20.20	Acores	Acores	Norte
Norte	Norte	Norte	Centro
Centro	Centro	Centro	Lisboa
Alentejo	Alentejo	Alentejo	Alentejo
Algarve	Algarve	Aigarve	Algarve

The first number is referred to the larger cluster, the second is referred to the cut of the clustering tree, the third is referred to the cluster number.

TABLE IV

		Clusters	iers												20 C	20 Clusters									
Indicators	-	7	3	4	Indicators	_	2	3	4	2	9	7	×c	6	2	=	15	13	14	15	16	17	er 18	61	20
M SOD	25.76	19.41	21.75	11.12	M SOD	38.01	10:01	18.53	23.39	40.94	15.44	10.22	13.40	12.77	3.36	14.82	11.25	12.94	10.01	32.92	29.73	42.74	15.70	90'0	8 22
ASOD (	61.13	62.11	57.88	62.06	ASOD	54.36	73.96	67.07	62.99	54.70	62.83	4.45	61.95	67.03	62.83	66.54	53.47	73.50	80.00	50.82	57.27	48.37	20.67	85.71	60.26
AINSOD	10.08	15.16	14.97	20.45	AINSOD	5.67	14.13	10.61	10.41	4.16	16.36	21.46	17.08	15.62	27.20	15.68	28.99	10.78	10.00	11.12	10.05	7.41	26.31	14.29	21.01
MINSOD	3.04	3.33	5.40	6.37	MINSOD	1.96	1.90	3.79	3.21	0.20	5.37	3.91	7.57	4.57	09.9	2.96	6.28	2.78	0.00	5.12	2.95	1.48	7.32	000	10.51
COPERAL	20.54	25.53	48.13	27.23	COPERAL	22.12	8.59	19.41	38.98	30.25	20.20	47.62	45.31	14.82	14.02	15.08	21.39	42.86	10.00	44.10	68.63	38.08	26.17	71.43	41.42
	08'09	16'59	45.49	65.52	CMEINF	55.60	70.47	64.26	51.93	54.05	63.80	49.09	43.65	76.89	82.31	75.68	69.69	19.05	80.00	49.97	30.98	59.20	70.79	28.57	55.85
۵.	18.66	8.56	6.37	7.25	CMESUP	22.28	20.94	16.33	60.6	15.70	16.00	3.29	2	8.29	3.68	9.24	8.92	38.10	10.00	5.93	0.39	2.73	3.04	00.0	2.73
턴	50.73	19.94	54.13	23.99	NOREL	42.97	66.82	40.66	25.09	62.68	89.68	73.71	52.61	44.35	6.14	20.31	7.91	5.36	0.00	51.50	33.39	27.84	27.33	28.57	3.98
•	49.27	80.06	45.87	76.01	REL	57.03	33.18	59.34	74.91	37.32	40.32	26.29	47.39	55.65	93.86	69.62	92.09	25.62	100.00	48.50	1999	72.16	72.67	71.43	96.02
- 10	64.82	51.46	45.17	30.40	MAXESG	68.69	72.35	60:09	54.49	60,32	60.86	49.28	34.48	35.57	26.66	52.03	48.92	41.67	90.09	54.98	37.42	40.29	34.34	33.33	13.79
	19.20	18.11	23.34	18.81	NEUESG	14.34	21.20	23.51	21.25	31.59	16.71	32.46	27.06	23.07	17.53	17.02	16.35	16.86	10.00	15.95	20.41	18.06	17.08	16.67	16.39
	15.98	30.43	31.49	50.79	MINESG	15.77	6.45	16.40	24.27	8.09	22.44	18.26	38.45	41.36	55.82	30.95	34.73	41.48	30.00	29.09	42.16	41.65	48.58	50.00	69.82
	37.64	33.77	43.73	45.05	ECOPES	40.40	46.90	32.68	37.20	33.73	36.19	32.00	41.05	39.04	37.85	36.91	33.59	60.58	0.00	45.75	64.43	20.26	51.57	14.29	49.78
ECONEU	19.92	18.40	18.31	20.88	ECONEU	13.15	36.72	21.61	26.14	8.00	25.90	18.13	27.49	22.63	24.38	17.01	12.84	27.78	10.00	12.52	11.50	10.64	12.75	42.86	20.20
۲	45.44	47.84	37.96	34.08	ECOOTT	46.45	16.38	45.71	36.66	58.26	37.91	49.87	31.46	38.33	37.77	46.08	53.57	11.65	90.00	41.74	24.07	11.69	35.68	42.86	30.02
	33.84	19.96	36.93	31.74	FINPES	34.23	47.38	31.83	22.42	24.98	33.29	32.66	30.15	31.26	26.60	18.17	19.95	37.29	20.00	40.94	50.08	19.52	30.57	14.29	38.50
HINNEU	36.78	48.09	29.49	40.64 40.64	FINNEU	35.66	33.86	43.60	50.04	37.57	33.14	31.39	44.07	43.09	26.52	49.85	43.31	48.61	70.00	18.96	19.04	34.67	38.37	85.71	36.16
FINOTE	29.39	31.95	33.58	27.62	FINOTT	30.11	18.76	24.57	27.54	37.45	13 57	35 05	35.78	25.65	46.92	31 08	26.74	17 10	20.00	40.00	30.88	45.90	31.00	8	36 36

TABLE IV

Continued

Objective and subjective indicators: cluster related averages at the different aggregation levels (20-4)

						Qι	JΑ	LI	ΤY	O	F	LII	FΕ	IN	ΙE	UR	O	PΕ												8
le	07	75.23	89.53	22.23	26.16	90.66	31.46	83.68	38.76	16.65	70.21	75.82	8.99	45.69	22.99	22.33	51.67	47.20	1.14	69.9	93.31	10.18	17.27	72.55	46 97	22.99	30.09	44 09	33.36	22.55
٩	6	52.43	96.45	7.20	38.81	82.11	44 06	39.06	80.92	12.19	8.89	48.25	5.78	68.82	22.46	2.94	25.94	71.21	2.85	2.59	97.41	15.15	15.85	10.69	46.46	20.49	33.05	31.85	37.17	30.99
٩	S	82.60	77.45	65.65	51.46	62.56	25.36	35.89	16291	63.29	25.27	38.39	26.	63.31	15.46	3.59	15.97	81.02	3.01	36.40	63.60	33.21	20.01	46.77	37.55	25	46.80	23.15	41.85	35.01
:	1	62.51	91.62	77.66	48.34	77.78	47.62	60.49	69.38	71.08	25.64	38.44	18.86	49.73	24.79	6.63	25.44	71.93	2.64	27.64	72.36	39.37	14.37	46.26	46.77	14.16	39.07	24.95	41.53	33.52
	10	46.99	75.68	35.06	21.58	45.69	22.85	61.29	46.29	73.69	29.08	43.01	41.03	49.48	7.27	2.23	52.57	43.34	60.4	29.26	70.74	37.71	22.55	39.75	28.84	96 5	65.20	21.59	40.47	37.94
,	2	58.27	72.30	17.07	2.31	46.01	5.74	39.58	45.41	63.34	23.47	69.55	31.64	54.05	10.14	4.17	58.65	39.36	1.99	42.03	57.97	42.10	18.28	39.62	60.30	11.55	28.15	49.56	18.58	31.86
-	±.	56.81	40.95	15.03	28.29	67.14	9.03	50.49	41.00	40.90	52.91	55.75	33.37	58.53	6.43	1.67	32.65	57.22	10.12	31.67	68.33	57.93	22.94	19,13	29.21	26.42	44.36	15.71	50.85	33.43
2	2	52.85	68.81	13.89	30.31	8.66	12.66	54.80	41.35	49.46	26.75	38.02	38.57	56.77	3.25	1.41	26.82	55.57	17.61	39.35	60.65	66.88	16.15	16.97	41.98	10.58	47.44	34.11	35.53	30.36
5	71	74.68	80.41	57.97	72.45	74.91	38.51	38.89	75.96	60.75	24.49	38.88	5.00	82.86	12.14	0.00	40.71	54.29	5.00	14.29	85.71	46.67	13.33	40.00	7.14	26.43	66.43	17.14	77.86	5.00
11	=	57.58	82.24	60.69	60.53	76.47	29.54	75.74	42.28	16'05	16.05	27.43	9.53	53.68	29.98	6.81	20.92	71.46	7.62	12.98	87.02	49.02	15.55	35.43	41.47	15.18	43.35	24,45	38.64	36.91
10 Citators	2	83.51	53.50	23.56	49.11	74.34	15.67	39.46	54.68	27.81	28.75	67.41	15.37	67.48	14.11	3.04	15.72	74.42	9.87	18.59	81.41	52.50	17.39	30.11	35.58	15.03	49.39	19.11	50.12	30.77
o	,	63.15	73.99	25.38	18.94	62.12	13.08	74.49	28.03	47.12	62.46	56.24	12.57	63.54	17.07	6.82	30.94	62.38	89.9	19.53	80.47	40.89	22.19	36.91	42.36	25.72	31.92	28.46	38.01	33.54
۰	، ا	57.09	66.39	28.80	43.01	73.04	16.91	38.19	56.52	45.00	45.51	40.61	17.69	4.14	15.21	2.96	45.28	32.99	21.73	11.86	88.14	43.93	19.61	36.46	54.55	25.94	19.51	32.91	46.74	20.35
-	-	59.04	67.26	30.16	14.54	56.44	22.74	55.37	50.13	47.59	71.75	42.46	13.20	167.97	14.34	4.49	20.85	62.48	16.67	51.53	48.47	50.38	23.87	25.75	34.76	31.34	33.90	33.12	40.67	26.21
4		57.88	69.02	41.40	18.85	63.38	11.79	45.73	46.75	49.65	79.23	40.51	14.60	58.66	18.09	8.65	46.52	43.87	9.61	52.61	47.39	34.41	25.22	40.38	44.05	25.71	30.24	31.60	43.23	25.17
~	,	46.90	46.51	15.77	15.61	23.42	7.05	90.80	11.32	32.18	34.74	29.64	32.89	53.23	6.87	4.01	15.34	56.80	27.86	52.45	47.55	73.13	13.02	13.85	35.65	18.85	45.50	32.12	33.79	34.10
F	,	79.73	91.76	31.68	20.02	19:59	11.59	29.65	57.66	48.15	58.64	82.10	10.22	£.	21.46	3.91	47.62	49.09	3.29	73.71	26.29	49.28	32.46	18.26	32,00	18.13	49.87	32.66	31.39	35.95
~	,	58.71	64.12	23.50	15.43	40.26	8.51	11.99	29.26	49.85	33.79	56.35	29.25	52.22	13.17	5.36	35.52	56.14	8.34	55.51	44.49	58.84	18.99	22.18	38.85	15.22	45.93	38.86	22.70	38.44
,	,	79.86	13.51	15.80	13.43	36.48	1.96	60.24	27.87	18.78	65.16	17.71	9.30	77.37	13.33	0.00	5.26	73.50	21.24	63.46	36.54	75.44	19.30	5.26	50.35	35.79	13.86	50.35	35.79	13.86
-	.	63.02	53.46	10.15	21.62	59.36	8.42	25.39	57.69	28.59	43.50	68.83	19.70	69.30	9.41	1.60	23.25	58.52	18.23	41.24	58.76	63.18	21.03	15.78	37.61	15.31	47.07	28.60	45.93	25.47
Indicators	510310111	DEM	<u>B</u> CO	220	SEX	SAN	AGR	DN ON	TER	AUTO	SUI	AMB	MSOD	ASOD	AINSOD	MINSOD	COPERAL	CMEINF	CMESUP	NOREL	REL	MAXESG	EUESG	MINESG	ECOPES	ECONEU	ECOOTT	FINPES	FINNEU	FINOTT
4	٠	65.75	81.68	80.08	46.59	73.38	30.11	54.78	57.26	57.63	30.54	41.70	13.17	60.39	20.74	5.70	27.63	66.04	6.33	19.39	80.61	36.65	17.57	45.78	41.84	19.16	39.01	27.12	42.31	30.57
-		63.19	73.12	33.91	17.04	95.09	16.98	46.84	50.74	48.34	71.18	50.48	12.98	64.36	17.03	5.63	34.48	53.91	11.62	\$6.68	43.32	45.28	26.15	28.57	36.99	26.75	36.26	32.56	39.43	28.01
2	۱	55.90	60.79	19.28	16.05	32.36	8.98	63.18	32.17	48.54	32.38	50.88	31.62	55.01	71.6	3.61	33.62	53.29	13.09	48.24	51.76	59.60	17.45	22.95	42.32	15.68	45.00	38.35	28.34	33.31
-		71.12	50.87	17.31	35.61	67.85	11.87	37.07	52.83	30.80	38.70	65.46	20.56	66.22	10.94	2.28	21.76	65.54	12.71	28.86	71.14	57.19	19.76	23.04	34.93	17.50	47.57	21.56	48.88	29.56 33.31
Indicators																														FINOTT

TABLE V

Social well-being: cutting the clsutering tree at the different levels (20-16-12-4)

CLUSTER 20	CLUSTER 16	CLUSTER 8	CLUSTER 4
Schleswig-Holstein	Schlerwig-Holstein	Schleawig-Holatein	Schleswig-Holstein
Niedersachsen	Niedersachsen	Niedersachsen	Niedersschsen
Hessen	Hessen	Hessen	Hessen
Limburg	Barlen Wuerttemberg	Baden Wuernemberg	Rheinland-Pfetz
Pais Vasco	Sazrland	Saurland	Baden Wuerttemberg
Baden Wuerttemberg	Liguria	Picardic	Bevern
Saarland	Limburg	Provence-Alpes-Cot	Sazrland
Ligaria	cancebria	Liguria	Nord-pes de Calais
Ligara Cantahna	Pais Vasco	Limburg	Picardie
***************************************	Arason	Madrid	Aquitaine
Aragon Rheinland-Pfalz	Rheinland-Pfalz	galicia	Midi-Pyrénéés
	1 1	cantabria	Provence-Alpes-Cot
Bayern	Bayern Nord-pas de Calais	Pois Vasco	Emilia Romagna
Nord-pas de Calais		Anagon	Lazio
Aquitaine	Aquitoinc	cataluna	Piemonte+V. D'Aost
Emilia Romagna	Emilia Romagna	\$   · · · · · · · ·	11
Lazio	Lario	Pais Valenciano	Liguria
Piemo <del>nic+V. D'Aosta</del>	Piemonte+V. D'Aost	Andalusia	Trentino
Fradi V G.	Frati V G	Muteia	Friuli V.G.
Toscana	Toscana	Rheinland-Pfalz	Toscana
Brabant (Wallon+Vlaams)	Brabant (Wallon+Vlancus)	Bayern	Limburg
Limburg	Limburg	Nord-pas de Calais	Bratent (Wallon+Vleams)
Oost-Vlaanderen	Oost-Vlaanderen	Aquitaino	Аничетреп
West-Vlaanderen	West-Vlaasderen	Midi-Pyrénéés	Limburg
LUSSEMBURGO	LUSSEMBURGO	Emilia Romagna	Oost-Vlaanderen
Castilla Loon	castilla leon	Lazio	West-Vlaanderen
Extremadura	extremadora	Picmonic+V D'Aost	LUSSEMBURGO
Picardic	Picardic	Тесміно	Madrid
Provence-Alpes-Cot	Provence-Alpes-Cot	Friuli V.G	galicia
Madrid	Madrid	Toscana	Asturias
Galicia	galicia	Brabani (Wallon+Viaoms)	centabria
Catoluna	cateluna	Astwerpen	Pas Vasco
País Valenciano	Pais Valenciano	Limburg	Rioja
Andalusia	Andalusto	Oost-Vlamderen	Aragon
Мысса	Murcin	West-Vlaanderen	castilla kon
Mid: Pyrénées	Mids-Pyrénées	LUSSEMBURGO	extremadura
Trentino	Treptino	Asturins	catalene
Antworpen	Antwerpen	Rioja	Past Valenciano
Astorias	Asturias	casulla leon	Andalusu
Rioja	Rioya	extremadura	Митсы
Franche-Compté	Franche-Compté	Franche-Сонгріе	Franche-Compté
Nomur	Molue e Abruzzi	Molise e Abrozzi	Limousin
Conarios	Luxembourg	Luxembourg	Lombardia
Castilla la mancha	Namur	Namer	Campania
Lisboa	Canarias	Conarias	Veneto
Alentejo	Castilla la mancha	Castilla la manche	Umbria
Algane	Acores	Acores	Marche
Abruzzi e Molise	Lisboa	Lisboa	Molise e Abrazzi
Luxembourg	Alentejo	Alentejo	Puglie
Acores	Alganye	Algarse	Basilicata
Limousin	Limousin	Limousin	Calabrin
Calabna	Campania	Lombardia	Sicilia
Madeira	Calabria	Сатраніа	Sardegna
None	Siertia	Vencio	Luxembourg
Centro	Serdegna	Umbria	Namur
		I K	Cenerius
Сатронів	Madeux	Marche	Castilla la mancha
Sicilia	None	Puglia	Castilla le manche Acores
Sardcena	Селиго	Basilicaia	1 F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Lombardia	Lombardia	Calabria	Madesra
Veneto	Veneso	Sicilia	Norte
Umbna	Umbria	Sardegna	Centro
Marche	Marche	Madeira	Lisbon
Pugha	Puglis	Morte	Alentejo
Davitiana	A Stranbase	I ICantro	E Báleania

# TABLE V

## Continued

CLUSTER 20	CLUSTER 16	CLUSTER 8	CLUSTER 4
Hamburg	Hamburg	Hamburg	Hamborg
Basso-Normandic	Basse-Normandie	Bremea	Bremen
Pays de la Loire	Pans de la Loire	Nordrhein-Westfalen	Nordrhein-Westlaten
Bremen	Bremen	lie de France	Berlin
Centre	Centre	Champagne-Ardenne	Brandeburg
Bourgogne	Bourgogne	Haute-Normandic	Mackienburg Vorpom
Alsace	Alsace	Centre	Sachsen
Rainaut	Hainsut	Basae-Normandic	Sachsen-Anhalt
Liege	Licest	Bourgogne	Thuringen
Nordrhein-Westfalon	Nordrhein-Westfales	Lorraine	lle de France
Champagne-Ardenne	lle de France	Alsace	Champagne-Ardenne
Poitou-Charentes	Champagne-Ardenne	Pays de la Loire	Haute-Normandie
Apveranc	Haute-Normandie	Bretagne	Centre
lie de France	Lorrainc	Poisou-Charentes	Basse-Normandic
Haute-Normandie	Bretagne	Rhone-Alpes	Bourgogne
Lorraine	Poitou-Charentes	Auvergne	Lorraine
Breingne	Rhone-Alpes	Languedoc-Roussill	Alsacc
Rhone-Alpes	Auvergne	Bravelles	Pays de la Lorre
Languedoc-Roussill	Languedoc-Roussill	Haineut	Bretagne
Bruxelles	Bruxelles	Liesc	Poitou-Charentes
Berlin	Berlin	Berlin	Rhone-Alpes
Brandeburg	Brandeburg	Brandeburg	Auvergne
Macklenburg Vorponi	Macklenburg Vorpom	Macklenburg Vorpom	Languedoc-Roustill
Sachsen	Suchsen	Sachsen	Bruxelles
Sachsen-Anhelt	Sachsen-Auhalt	Sackson-Anhalt	Hainaut
Thuringen	Thurangen	Thursten	Liege

CLUSTER 20	CLUSTER 16	CLUSTER 8	CLUSTER 4
Стопіпест	Groningen	Groningen	Groningen
East Anglia	East Anglia	Friesland	Freeland
Balcares	Balcares	Dranche	Dranthe
Fresland	Friesland	Overigael	Overijssel
Oranthe	Drantisc	Gelderland	Golderland
Occupsed	Overijssel	Flevoland	Flexoland
Gelderland	Gelderland	Noord-Brabent	Noord-Brabant
Secoland	Flevoland	Utrechi	Utrecht
Voord-Brubent	Noord-Brabant	Noord-Holland	Noord-Holland
Utrecht	Utrecht	Zuid-Holland	Zuid-Hoffand
Noord-Holland	Noord-Holland	Zociand	Zocland
Luid-Holland	Zuid-Holland	East Anglia	North
colend	Zecland	South East	Yorkshire Humber
South East	South East	South East	East Midlands
South West	South West	North West	East Anglia
North West	North West	NORTHERN IRELAND	South East
orth .	North	IRELAND	South West
orkshire Humber	Yorkshire Humber	DANMARK	West Midlands
ast Midlands	East Midlands	Novarra	North West
Vest Midlands	West Midlands	Balcaros	Wales
Valcs	Wales	North	SCOTLAND
COTLAND	SCOTLAND	Yorkshire Humber	NORTHERN IRELAND
ORTHERN IRELAND	NORTHERN IRELAND	East Midlands	IRELAND
RELAND	IRELAND	West Midlands	DANMARA
DANMARK	DANMARK	Wales	Navarra
Nevarra	Navarre	SCOTLAND	Balcares

TABLE VI

Objective and subjective indicators: cutting the clustering tree at the different levels (20-16-8-4)

CLUSTERS 20	CLUSTERS 16	CLUSTERS 8	CLUSTERS 4 (larger cit	ısters)
Schleswig-Holstein 1.20.1*	Schleswig-Holstein	Schleswig-Holstein	Schlerwig-Holstein	DE
Niedersachsen	Niedersachsen	Niedersachsen	Niedersachsen	DE
Nordthein-Westfalen	Nordrhein-Westfalen	Nordrhein-Westfalen	Nordrhein-Westfale	DE
Hessen	Hessen	Hessen	Hessen	DE
Rheinland-Pfalz	Rheinland-Pfalz	Rheinland-Pfalz	Rheinland-Pfalz	DE
Baden Wuerttemberg	Baden Wucrttemberg	Baden Wuerttemberg	Baden-Wurttemberg	DE
Bayem	Bayem	Bavern	Bavem	DE
Saarland	Saarland	Sastand	Saarland	DE
Antwerpen 1,29,14	Antwerpen	Antwerpen	Lombardia	п
Oost-Vlaanderen	Oost-Vlaanderen	Oost-Vlaanderen	Emilia Romagna	п
West-Vlaanderen	West-Vlaanderen	West-Vinanderen	Lazio	17
LUSSEMBURGO	LUSSEMBURGO	LUSSEMBURGO	Piemonte+Valle D'Aosti	IT
DANMARK	DANMARK	DANMARK	Lieuria	IT
Lombardia 1,20,10	Lombardia	Lombardia	Trentino	IT
	B	1	Veneto	IT.
Emilia Romagna	Emilia Romayna	Emilia Romagna		
Lazio	Lazio	Lazio	Friuli V G.	IT .
Piernonte+Valle D'Aosta	Piemonte+Valle D'Aosta	Piemonte+Valle D'Aosta	Toscana	IT
Liguria	Liguria	Liguria	Umbria	IT.
Trentino	Trentino	Trentino	Marche	IT
Veneta	Veneto	Veneto	Antwerpen	BE
Friuli V G	Friufi V G	Friuli V G	Oost-Vlaanderen	BE
Toscana	Toscana	Toscana	West-Vlaanderen	BE
Umbria	Umbria	Umbria	LUSSEMBURGO	LU
Marche	Marche	Marche	DANMARK	DK
Hamburg 2.20.2	Hamburg	Hamburg	Hamburg	DE 2
Bremen	Bremen	Bremen	Bremen	DE
Berlin <u>2,10.3</u>	Berlin	Berlin	Berlin lle de France	DE FR
Languedoc-Roussillon	Languedoc-Roussillon	Ile de France		FR
Provence-Alpes-Cot	Provence-Alpes-Coi	Languedoc-Roussillon	Languedoc-Roussillon	
Groningen	Groningen	Provence-Alpes-Cot	Provence-Alpes-Core d'	
Zeeland	Zectand	Groningen	Groningen	NL.
East Anglia	East Anglia	Friesland	Friesland	NL
South-East	South-East	Drenthe	Drenthe	NL.
South-West	South-West	Overijssel	Ovenjssel	NL
North-West	North-West	Gelderfand	Gelderland	NL
Balcares	NORTHERN IRELAND	Flevoland	Flevoland	NL
NORTHERN IRELAND 2,20,16	IRELAND	Noord-Brabant	Noord-Brabant	NL
IRELAND	Balcares	Limburg	Limburg	NL.
lle de France 2.28.5	He de France	Utrecht	Utrecht	NL
Flevoland	Flevoland	Noord-Holland	Noord-Holland	NL
Utrecht	Utrecht	Zuid-Holland	Zuid-Holland	Nŧ.
Noord-Holland	Noord-Holland	Zeeland	Zectand	NL
Zuid-Holland	Zuid-Holland	Bruxelles	Bruxelles	BE
Bruxelles	Bruxelles	East Anglia	North	UK
Friesland 2.20.13	Friesland	South-East		UK
Drenthe	Drentho	South-West	0	UK
Overljssel	Overijasel	North-West	R	UK
Gelderland	Gelderland	NORTHERN IRELAND	1000	UK
Noord-Brabant	Noord-Brabant	IRELAND		UΚ
Limbury	Limburg	Baicares		UK
North 2.28.15	North	North	North-West	UK
Yorkshire e Humber	Yorkshire e Humber	Yorkshire e Humber	Wades	UK
East Midlands	Exst Midlands	East Midlands	Scotland	UK
CHR MAGNING				
West Midlands	West Midlands	West Midlands	NORTHERN IRELANT	UK
	West Midlands Wales	West Midfands Wales	NORTHERN IRELANI IRELAND	UK IE

# TABLE VI Continued

CLUSTER 20	CLUSTER 16	CLUSTER 8	CLUSTERS 4 (larger clu	sters)
Brandenburg 3.20.4	Brandenburg	Brandenburg	Brandenburg	DE 3
Meckienburg-Vorpommern	Mecklenburg-Vorpommern	Mecklenburg-Vorpommern	Mecklenburg-Vorpomm	DE
Sachsen	Sachsen	Sachsen	Sachsen	DE
Sachsen-Anhalt	Sachsen-Anhalt	Sachsen-Anhalt	Sachsen-Anhalt	DE
Thuringen	Thuringen	Thuringen	Thuringen	DE
Nord-pas de Calais 3.20.6	Nord-pas de Calais	Nord-pas de Calsis	Nord-pas de Calais	FR
Picardie	Picardie	Champanne-Ardenne	Champagne-Ardenne	FR
Haute-Normandie	Haute-Normandie	Picardie	Picardie	FR
Basse-Normandie	Basse-Normandie	Haute-Normandie	Haute-Normandie	FR
Lorraine	Lorraine	Centre	Centre	FR
Hainaut	Hainaut	Basse-Normandie	Basse-Normandie	FR
Liége		Bourgogne	Bourgogne	FR FR
Champagne-Ardenne 3.20.7	Liége	Lorraine	Lorraine	FR
	Chempagne-Ardenne	В	Aisace	FR FR
Centre	Centre	Alsace		
Bourgogne	Bourgogne	Pays de la Loire	Pays de la Loire	FR
Alsace	Alsace	Bretagne	Bretagne	FR
Pays de la Loire	Pays de la Loire	Poitou-Charentes	Poitou-Charentes	FR
Bretagne	Bretagne	Aquitaine	Aquitaine	FR
Poitou-Charentes	Poitou-Charentes	Midi-Pyrénées	Midi-Pyrénées	FR
Aquitaine	Aquitaine	Rhone-Alpes	Rhone-Alpes	FR
Midi-Pyrénées	Midi-Pyrénées	Auvergne	Auvergne	FR
Rhone-Alpes	Rhone-Alpes	Hainnut	Hainaut	BE
Auverane	Auvergne	Liège	Liège	BE
			gr	den en
Franche-Compté 4.20.8	Franche-Compté	Franche-Compté	Franche-Compté	FR 4
Abruzzo e Molise	Abnizzo e Molise	Limousin	Limousin	FR
Limburg	Limburg	Abruzzo e Molise	Campania	rr
Luxembourg	Luxembourg	Brabant (Wallon+Vlaams)	Abruzzo e Molise	łT
Limousin 4.20.9	Limousin	Limburg	Puglia	ıτ
Brabant (Walton+Visams)	Brabant (Wallon+Vlaams)	Luxembourg	Basilicata	IT .
Namur	Namur	Namur	Calabria	rr
Lisboa	Lisboa	Acores	Sicilia	IT
Alentejo 4.20.20	Alentejo	Madeira	Sardegna	ir i
Alganye	Aluarye	None	Brabant (Wallon+ Visam	BE
Acores 4.20.19	Acores	Centro	Limburg	BE
Madeira	Madeira	Lisboa	Luxembourg	BE
None	None	Alentejo	Namur	BE
Centro	Centro	Algarve	Madrid	ES
Campania 4.20.11	Campania	Campania	Canarias	ES
Puulia	Puglia	Puglia	Galicia	ES
Calabria	Calabria	Basilicata	Asturias	ES
Sicilia	Sicilia	Calabria	Cantabria	ES
Sardeuna	Sardegna	Sicilia	Paix Vasco	ES
Madrid	Madnd	Sardegna	Navarra	ES ES
Canarias	Canarias	Madrid	Riois	ES
Basilicata 4.20.12	Basilicata	Canarias	Aragon	ES ES
	Riosa	Galicia	Castilla leon	ES ES
Rioja 4.28.17	Galicia	Astunas	Castilla la mancha	ES ES
	1			
Castilla la mancha	Asturias	Cantabria	Extremedura	E.S
Extremadura	Cantabria	Pais Vasco	Cataluna	ES
Andalusia	País Vasco	Navarra	Pais Valenciano	ES .
Murcia	Navarra	Rìoj#	Andalusia	ES
Asturias 4.20.18	Aragon	Aragon	Murcia	ES
Cantabria	Castilla leon	Castilla leon	Acores	PT
Pais Vasco	Castille la menche	Castille la menche	Madeira	PT
Navarra	Extremedura	Extremadura	Norte	PT
Aragon	Cataluna	Cataluna	Centro	PT
			1	ft
Castilla leon	Pais Valenciano	Pais Valenciano	Lisboa	PT
Castilla leon Cataluna	Pais Valenciano Andalusia	Pais Valenciano Andalusia	Lisboa Alentejo	PT PT
				, ·

The first number is referred to the larger cluster, the second is referred to the cut of the clustering tree, the third is referred to the cluster number.

#### **NOTES**

- <sup>1</sup> In the social sciences the geographical maps have been neglected as an analytic tool for a long time. The reason of this appears to lie largely in the common difficulties of using maps effectively and efficiently. Geographical Information System (GIS) is a computer technology for handling "geographic" data i.e. data where the detailed physical location is an essential element. GIS technology is a combination of digital mapping techniques and specialised data base management procedures. GIS are used to encode, store, maintain, retrieve, process, analyse and display data in their spatial context. GIS gives substantial advantages in data handling, analysis and presentation. The ability to link and display from different data sets (not necessarily with one identical geo-coding system) is both a powerful analytic tool and a way of presenting results with maximum impact. In this paper we considered the GIS for this ability to facilitate the statistical cluster analysis.
- <sup>2</sup> Alongside this study C. Rampichini and S. Schifini D'Andrea (Social Indicators Research, Vol. 44, n. 1, 1998) analysed individual satisfaction between Italian regions. Moreover, work is now underway to develop a multilevel model for the analysis of life satisfaction among European regions (C. Rampichini and S. Schifini D'Andrea: 1998, Subjective, Objective and Contextual Components of Life Satisfaction in Europe, *Draft only*).
- <sup>3</sup> For purposes of demonstration, in this paper, we have chosen a negative aspect of quality of life, that of "socio-economic unease."
- <sup>4</sup> By "macro" we refer to a country-wide study, as opposed to "micro" which we use to refer to a study at the individual level.
- <sup>5</sup> Eurostat data refer to 1994 and are found in the 1995–1996 and 1997 volumes (Cfr. Eurostat, Regions Series, Theme 1A).
- <sup>6</sup> The regions of Eurostat are not exactly comparable with those of Eurobarometer, and thus, right from the phase of the singling out of territorial units there is already a lack of uniformity. For example, the Eurostat data show some countries without regional divisions (Luxembourg, Denmark, Ireland), Eurobarometer divides these same countries into regions (Luxembourg = 4; Denmark = 4; Ireland = 9). There are regions that Eurostat separate (for example, Italy: Piedmont and Val d'Aosta) which are grouped together by Eurobarometer; and in other cases, vice versa. There are countries in which there is Eurobarometer data but not Eurostat data (ex: Norway), and others in which there is Eurostat data but not Eurobarometer data (Finland, Sverige). We have excluded Greece due to the impossibility of isolating l'Attiki, with the city of Athens, which in Eurobarometer data is not reported as a separate region.
- <sup>7</sup> Edited Eurostat data even have gaps at the level of single territorial units. For certain phenomena (e.g., for Holland: number of doctors; for the UK: number of hospital beds, cause of death) in the absence of regional data, data for the next level up was given. In particular, the UK is more problematic for purposes of comparison and thus the objective indicators often demonstrate a uniformity that most probably does not correspond to reality.

<sup>8</sup> This method is distinct from all other methods because it uses an analysis of variance approach to evaluate the distance between clusters. In short, this method attempts to minimize the Sum of Squares of any two (hypothetical) clusters that can be formed at each step. In general this method tends to create clusters of small size. We have noticed that when the similarity between observations is strong, analogous aggregations result even when other methods are used For example, here is the first cluster that is confirmed with Ward's method and with the complete tie method.

Hainaut Liege
Namur Luxembourg
Baden Wuerttemberg Bayern

Brandeburg Macklenburg Vorpommern

Sachsen Sachsen-Anhalt

Aragon La Rioja
Asturias Pais Velenciano
Cantabria Castilla Leon
Cataluna Pais Vasco

Champagne-Ardenne Centre Bourgogne Pays de la Loire

Thuringen

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<sup>&</sup>lt;sup>9</sup> Clusters are indicated by three numbers in parentheses: the first is in reference to the larger cluster obtained at the level of 4 European divisions; the second to the level at which the tree is cut (in this case comprised of 20 parts); the third to the number of the particular cluster within the grouping under consideration.

<sup>&</sup>lt;sup>10</sup> See note n. 7.

<sup>11</sup> See note n. 2.

Rampichini, C. and S. Schifini D'Andrea: 1998, 'A hierarchical ordinal probit model for the analysis of life satisfaction in Italy', Social Indicators Research 44, pp. 41–69.

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