

ANNEX VII:

INDEXES METHODOLOGY AND ELABORATION

Five different indexes were calculated for the Islands statistical units and the Member States they are located in and the EU:

- (a) One for the state of the above areas (State Index);
- (b) One for changes that have taken place during the last decade or so, depending on the availability of time series for the particular indicators used (Change Index);
- (c) Three for the attractiveness of the islands:
 - One for attractiveness based on issues of accessibility and urban dynamism, the direct effects of insularity (Attractiveness Direct Index);
 - One for attractiveness based on indicators that cover the rest of the attractiveness factors identified in the report as indirect effect of insularity (Attractiveness Indirect Index);
 - One for the attractiveness based on the natural and cultural potential of the islands (Attractiveness Potential Index).

The 3 attractiveness indexes are not directly comparable and cannot be synthesized to a composite one as the availability of data is not homogeneous. For urban dynamism the Functional Urban Areas (FUA) concept was used, for which data are available only at NUTS 3 level, which is the case of the accessibility indicators as well. Therefore, a European average is not available and the classes that were used for the calculation of the index had to be estimated with different methods (details below). Data for Attractiveness Potential Index are also available for NUTS 2/3 regions. On the contrary, indicators for other attractiveness factors (education level, R& D and ICT) are available at NUTS 0 and NUTS2 level.

For the values of all indicators 9 classes were created. These classes were constructed with the basic assumption that the European average in the particular indicator and the values around this average should form the middle class and four classes should be constructed with higher values than the middle class and four with lower values. The middle class has a width of ten values and the six subsequent classes also have a ten value width, while the two extreme classes include all the values that are lower or higher. In the four cases where the European average was not available, the range of the values of the indicator was divided by nine and nine equal classes were created. The limits of the classes are presented in Table 1.

Table 1: Limits of the classes used for the construction of the indexes.

Class	Indicators of change, where EU27 change = 0%	Indicators where EU27 = 100	FUA (Max=5, min =0)	Accessibility (Max=190, min = 24)
1	<-35	< 65	0 to 0,55	24 to 42,4
2	-35 to -25	65-75	0,55 to 1,1	42,4 to 60,8
3	-25 to -15	75-85	1,1 to 1,65	60,8 to 79,2
4	-15 to -5	85-95	1,65 to 2,2	79,2 to 97,6
5	-5 to 5	95-105	2,2 to 2,75	97,6 to 116
6	5 to 15	105-115	2,75 to 3,3	116 to 134,4
7	15 to 25	115-125	3,3 to 3,85	134,4 to 152,8
8	25 to 35	125-135	3,85 to 4,4	152,8 to 171,2
9	> 35	> 135	4,4 to 5	171,2 to 190

The calculation of each index is based on the summing up of the values of the class of the individual indicators, assuming equal weight for each of the indicators that make up the index. The basic assumption is that the higher the value from the EU average the better the value of the index for the geographical areas. Therefore, when the indicator expresses a negative issue, such as the percentage of unemployment, the value of the class was inversed, i.e. if the value was 9 it becomes 1, if it was 8 it becomes 2, etc. Thus, the value of the index is always 'positive' and expresses how 'better' or 'worse' the state, the change or the attractiveness of the areas discussed are compared to the EU average and the average values of the member states with islands (except for the case of the first attractiveness index where the comparison is with the average value of the range of the values of the indicators).

The geographical areas that are considered for the calculation of the indexes include all types of NUTS areas:

1. EU27
2. NUTS 0: Member states with islands as statistical units (NUTS 2 and 3); 11 in total:
 - I. Cyprus (CY) island state
 - II. Denmark (DK)
 - III. Estonia (EE)
 - IV. Spain (ES)
 - V. Finland (FI)
 - VI. France (FR)

- VII. Greece (GR)
- VIII. Italy (IT)
 - IX. Malta (MT) island state
 - X. Sweden (SE)
 - XI. United Kingdom (UK)
- 3. NUTS 2: Island Regions or islands
 - I. Illes Balears (ES53)
 - II. Åland (FI20)
 - III. Corse (FR83)
 - IV. Ionian Islands (GR22)
 - V. North Aegean (GR41)
 - VI. South Aegean (GR42)
 - VII. Crete (GR43)
 - VIII. Sicily (ITG1)
 - IX. Sardegna (ITG2)
- 4. NUTS 3: Island Regions or islands
 - I. Bornholm (DK014)
 - II. Eivissa y Formentera (ES531)
 - III. Mallorca (ES532)
 - IV. Menorca (ES533)
 - V. Zakynthos (GR221)
 - VI. Kerkira (GR222)
 - VII. Kefallinia (GR223)
 - VIII. Lefkada (GR224)
 - IX. Lesbos (GR411)
 - X. Samos (GR412)
 - XI. Chios (GR413)
 - XII. Dodekanisos (GR421)
 - XIII. Kyklades (GR422)
 - XIV. Malta (MT001)
 - XV. Gozo (MT002)
 - XVI. Gotland (SE214)
 - XVII. Island of Wight (UKJ34)
 - XVIII. Eilean Siar (Western Isles) UKM64
 - XIX. Orkney Islands UKM65
 - XX. Shetland Islands UKM66

Some of the above islands are included in more than one NUTS level. Malta is such a case, which is both a Member State (along with Gozo) and a NUTS 3 area, separate from Gozo. Greek islands are another case where the NUTS 2 areas GR22, GR41 and GR42 have many islands, but are considered as a single unit, while the NUTS 3 divisions also have typically more than one island (12 for GR422, 20 for GR421, etc.). When data are available for both NUTS 2 and NUTS3 level for the same geographical area, only the NUTS3

data are included in the calculation of the index in order to avoid double counting.

Cyprus and Malta are included two times in the calculation of the indexes: within the calculation of the member-states average, but also in the calculation of the islands' average.

The **State** index is calculated twice with the use of four and five indicators:

- (a) GDP per capita for the year 2006 (EU 27=100);
- (b) The active population / total population (in %) for 2007 that is first transformed with the EU27=100 and then the classes are assigned to the values;
- (c) The unemployment rate (in %) for 2008 that is first transformed with the EU27=100 and then the classes are inverted to keep the overall scale of the values of the indicator already discussed above;
- (d) The percentage of population older than 65 for 2007, which is first transformed with the EU27=100 and then the classes are inverted to keep the overall scale of the values of the indicator already discussed above.
- (e) The percentage of artificial land to the total land from the CORINE data base in 2000, with the EU27=100 and then the classes are inverted.

Two State indexes are calculated:

- (a) the State 4 index where the 4 socio-economic indicators (a-d) are included;
- (b) the State 5 index where an environmental indicator is added.

The values of the indicators, the classes and the values of the state indexes are presented in Table 2. Descriptive statistics for GDP/capita, State 4 Index, State 5 Index and the Change index are presented in Table 3 for the NUTS 2/3 island regions and the member states with islands. The values of the indexes and GDP/capita are presented for the NUTS 2/3 island regions and the member states with islands are presented in Figures 1A,1B and 1C. In Figures 2A, 2B and 2C the values of selected state indicators are depicted. In Figures 3A,3B,3C and 3D scatterplots of GDP/capita, State 4 Index, State 5 Index and Change index are presented and in Table 4 the correlation matrix of the values of these indicators is provided.

The **Change** index covers the period 2000 – 2006 and is calculated with the use of three indicators:

- (a) population change (in %) that is first transformed with the EU27=100 and then the classes are assigned;
- (b) The GDP per capita with the EU27=100 change (in %), where the classes are assigned to the values;
- (c) The active population change (in %), which is first transformed with the EU27=100 and then the values of the indicator are assigned.

The values of the indicators, the classes and the values of the change index are presented in Table 5. The values of the indicator for the NUTS 2 or 3 island regions and the member states with islands are presented in Figure 4.

The first **Attractiveness** index (**Attractiveness Direct Index**) is calculated with the use of two indicators:

- (a) The average FUA value for which the classes are assigned according to the method laid down in Table 1;
- (b) The ESPON multimodal accessibility indicator for which the classes are assigned according to the method laid down in Table 1;

The values of the indicators, the classes and the values of the first attractiveness index are presented in Table 6A.

The second **Attractiveness** index (**Attractiveness Indirect Index**) is calculated with the use of five indicators:

- (a) The percentage of population with low education level % of the population in 2008 that is first transformed with the EU27=100 and then the classes are assigned and reversed;
- (b) Research and Development % of the GDP in 2008 that is first transformed with the EU27=100 and then the classes are assigned (data for NUTS 2 areas refer to 2007);
- (c) The percentage of households with broadband access % of the total number of households in 2008, which is first transformed with the EU27=100 and then the values of the indicator are assigned;
- (d) The unemployment rate for the group 15 to 24 years old in 2008, which is first transformed with the EU27=100 and then the classes are assigned and reversed;
- (e) The governance indicator is based on qualitative data produced by the ESPON 2006, Governance of Territorial and Urban Policies from EU to local level

For all these indicators data are available at NUTS 2 level typically and therefore the values are calculated only for NUTS 2 island regions. The values of the indicators, the classes and the values of the second attractiveness index are presented in Tables 6A and 6B.

The third **Attractiveness** index (**Attractiveness Potential Index**) is calculated with the use of two indicators:

- (a) The share of Natura 2000 area on the total area of the islands region (ESPON 2006, Territorial Trends of the Management of the Natural Heritage (Project 1.3.2);
- (b) The density of cultural monuments of the island regions as estimated by ESPON 2006, The role and the spatial effects of Cultural Heritage and Identity (Project 1.3.3).

The data for the two variables are provided by ESPON DataBase.

Table 2: Indicators, classes and calculation of the State Index

Geo name	GDP (EU=100) 2006	GDP (EU=100) 2006 classes	economically active % of population 2006	economically active % of population 2006 (EU27=100)	economically active % of population 2006 (EU27=100) classes	Population > 65% 2007	Population > 65% 2007 (EU=100)	Population > 65% 2007 (EU=100) classes	Population > 65% 2007 (EU=100) inverse classes
CY Cyprus	90,3	4	48,5	101,9	5	11,9	70,7	2	8
DK Denmark	122,9	7	53,7	112,9	6	16,5	97,9	5	5
DK014 Bornholm	89,4	4	49,3	103,7	5	19,8	117,7	7	3
EE Estonia	65,3	2	51,1	107,5	6	17,1	101,5	5	5
ES Spain	104,1	5	48,9	102,9	5	16,7	99,0	5	5
ES53 Illes Balears	114,4	6	53,0	111,5	6	13,7	81,5	3	7
ES531 Eivissa y Formentera	123,8	7	56,3	118,5	7	11,2	66,6	2	8
ES532 Mallorca	111,5	6	52,4	110,2	6	14,1	84,0	3	7
ES533 Menorca	124,2	7	54,2	114,0	6	13,4	79,7	3	7
FI Finland	114,9	6	50,3	105,7	6	16,5	97,9	5	5
FI20 Åland	146,7	9	54,1	113,8	6	16,9	100,8	5	5
FR France	109,5	6	44,6	93,8	4	16,3	96,6	5	5
FR83 Corse	85,8	4	32,3	67,8	2	19,9	118,2	7	3
GR Greece	94,1	4	43,8	92,2	4	18,6	110,4	6	4
GR22 Ionia Nisia	73,9	2	43,1	90,7	4	21,1	125,6	8	2
GR221 Zakynthos	92,3	4	55,0	115,6	7	17,8	105,6	6	4
GR222 Kerkyra	67,1	2	46,0	96,8	5	20,5	122,0	7	3
GR223 Kefallinia	82	3	19,5	40,9	1	24,1	143,5	9	1
GR224 Lefkada	64,9	1	45,7	96,2	5	25,3	150,2	9	1
GR41 Voreio Aigaio	67,4	2	38,6	81,2	3	21,9	130,4	8	2
GR411 Lesvos	64,1	1	45,6	95,9	5	22,1	131,7	8	2
GR412 Samos	65,4	2	32,2	67,8	2	22,6	134,5	8	2
GR413 Chios	75,9	3	29,6	62,2	1	20,9	124,5	7	3
GR42 Notio Aigaio	96,2	5	41,5	87,3	4	15,3	90,8	4	6
GR421 Dodekanisos	91,7	4	40,2	84,5	3	13,1	78,1	3	7
GR422 Kyklades	104	5	43,9	92,4	4	19,0	112,8	6	4
GR43 Kriti	82,8	3	45,9	96,6	5	17,3	103,0	5	5
IT Italy	103,5	5	41,8	88,0	4	19,9	118,6	6	4
ITG1 Sicilia	66,9	2	34,6	72,8	2	18,2	107,9	6	4
ITG2 Sardegna	79,5	3	41,1	86,4	4	18,0	106,8	6	4
MT Malta	76,9	3	40,3	84,7	3	13,8	82,3	3	7
MT001 Malta	78,4	3	40,8	85,7	4	13,8	81,9	3	7
MT002 Gozo and Comino	59,2	1	35,0	73,6	2	14,6	86,6	4	6
SE Sweden	121,5	7	52,5	110,4	6	17,4	103,2	5	5
SE214 Gotlands län	98,1	5	53,8	113,2	6	18,9	112,3	6	4
UK United Kingdom	120,4	7	50,5	106,1	6	16,0	95,4	5	5
UKJ34 Isle of Wight	81,1	3	43,5	91,5	4	22,8	135,5	9	1
UKM64 Eilean Siar (Western Isles)	77,7	3	56,0	117,7	7	20,9	124,2	7	3
UKM65 Orkney Islands	94	4	56,6	119,1	7	18,8	111,9	6	4
UKM66 Shetland Islands	110,9	6	64,1	134,8	8	16,2	96,4	5	5
European Union (27 countries)	100	5	47,6	100,0	5	16,8	100,0	5	5

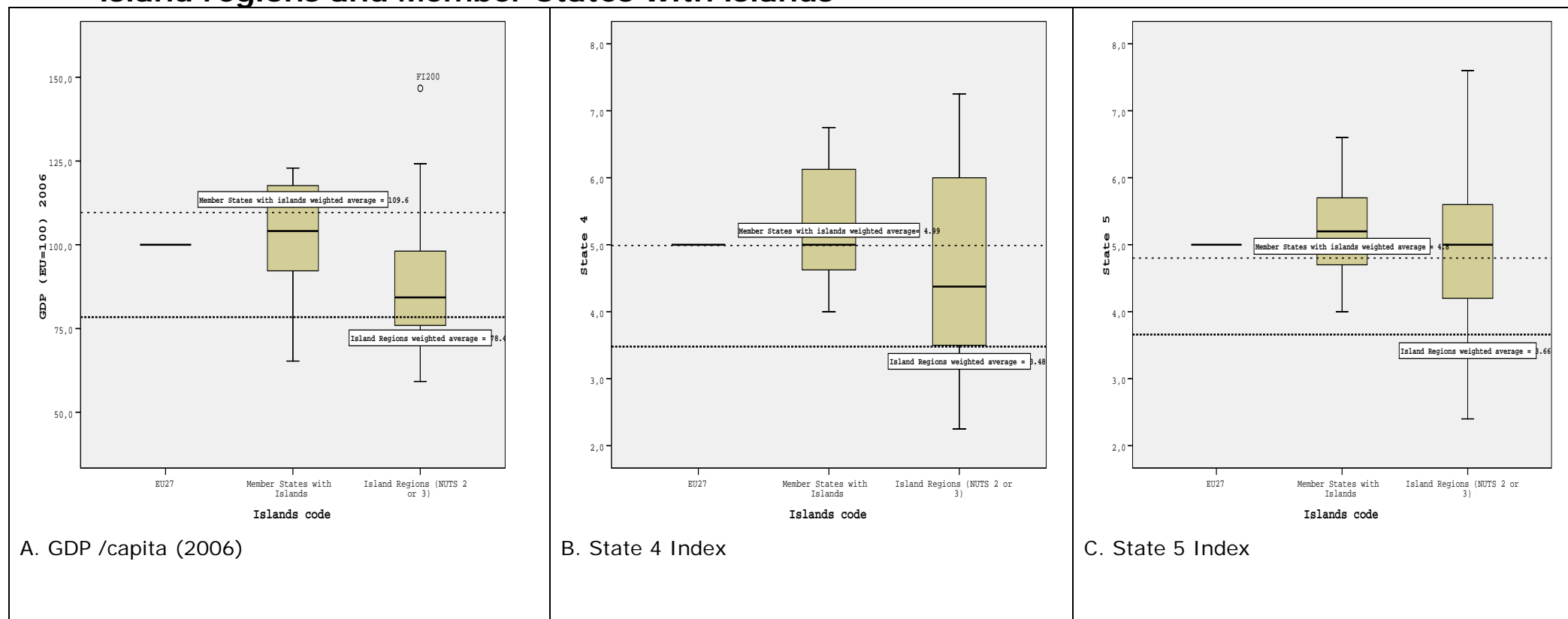
Table 2 (continued): Indicators, classes and calculation of the State Index

Geo name	Unempl- oyment total % 2008	Unempl- oyment total % 2008 (EU=100)	Unempl- oyment total % 208 (EU=100) classes	Unempl- oyment total % 208 (EU=100) classes inverse	Artificial land (2000)	Total area	Artificial land % of total land (2000)	Artificial land % of total land (2000, EU27=100)	Artificial land % of total land (2000, EU27=100) inverse classes	State 4	State 5
CY Cyprus	3,7	52,9	1	9	68775	923056	7,5	178,7	1	6,5	5,4
DK Denmark	3,3	47,1	1	9	308733	4282331	7,2	172,9	1	6,8	5,6
DK014 Bornholm	6,7	95,7	5	5	3542	58640	6,0	144,9	1	4,3	3,6
EE Estonia	5,5	78,6	3	7	91318	4344961	2,1	50,4	9	5,0	5,8
ES Spain	11,3	161,4	9	1	831694	50587566	1,6	39,4	9	4,0	5,0
ES53 Illes Balears	7	100,0	5	5	26966	498195	5,4	129,8	2	4,5	4,0
ES531 Eivissa y Formentera	8	114,3	5	5	3266	65302	5,0	119,9	3	6,8	6,0
ES532 Mallorca	6,8	97,1	5	5	19862	363555	5,5	131,0	2	6,0	5,2
ES533 Menorca	7,3	104,3	6	4	3838	69338	5,5	132,7	2	6,0	5,2
FI Finland	6,4	91,4	4	6	467687	33760974	1,4	33,2	9	5,8	6,4
FI20 Åland	2,2	31,4	1	9	2623	143461	1,8	43,8	9	7,3	7,6
FR France	7,8	111,4	6	4	2657451	54874701	4,8	116,1	3	4,8	4,4
FR83 Corse	8,2	117,1	7	3	15431	871736	1,8	42,4	9	3,0	4,2
GR Greece	7,7	110,0	6	4	285084	13133410	2,2	52,1	9	4,0	5,0
GR22 Ionia Nisia	8,5	121,4	7	3	4668	227557	2,1	50,4	8	2,8	3,8
GR221 Zakynthos	8,7	124,3	7	3	934	40334	2,3	55,5	9	4,5	5,4
GR222 Kerkyra	10,5	150,0	9	1	2228	62623	3,6	85,3	4	2,8	3,0
GR223 Kefallinia	1,7	24,3	1	9	1023	89600	1,1	27,4	9	3,5	4,6
GR224 Lefkada	5,7	81,4	3	7	483	35000	1,4	33,1	9	3,5	4,6
GR41 Voreio Aigaio	4,5	64,3	1	9	3969	380525	1,0	23,1	9	4,0	5,0
GR411 Lesvos	4,4	62,9	1	9	2767	213608	1,3	31,1	9	4,3	5,2
GR412 Samos	2,6	37,1	1	9	742	77023	1,0	23,1	9	3,8	4,8
GR413 Chios	6	85,7	4	6	460	89894	0,5	12,3	9	3,3	4,4
GR42 Notio Aigaio	8,1	115,7	7	3	9483	522814	1,8	43,5	9	4,5	5,4
GR421 Dodekanisos	10,1	144,3	9	1	4857	267078	1,8	43,6	9	3,8	4,8
GR422 Kyklades	3,9	55,7	1	9	4626	255736	1,8	43,4	9	5,5	6,2
GR43 Kriti	6,3	90,0	4	6	12720	830784	1,5	36,7	9	4,8	5,6
IT Italy	6,7	95,7	5	5	1425966	30124997	4,7	113,5	4	4,5	4,4
ITG1 Sicilia	13,8	197,1	9	1	124373	2570487	4,8	116,0	3	2,3	2,4
ITG2 Sardegna	12,2	174,3	9	1	66372	2409530	2,8	66,1	8	3,0	4,0
MT Malta	6	85,7	4	6	8150	27822	29,3	702,5	1	4,8	4,0
MT001 Malta	6,1	87,1	4	6	6729	22165	30,4	728,0	1	5,0	4,2
MT002 Gozo and Comino	5,5	78,6	3	7	1421	5657	25,1	602,4	1	4,0	3,4
SE Sweden	6,2	88,6	4	6	604793	44932251	1,3	32,3	9	6,0	6,6
SE214 Gotlands län	5,8	82,9	3	7	5578	316567	1,8	42,3	9	5,5	6,2
UK United Kingdom	5,6	80,0	3	7	1812430	24424942	7,4	177,9	1	6,3	5,2
UKJ34 Isle of Wight	5,2	74,3	2	8	4164	38029	10,9	262,6	1	4,0	3,4
UKM64 Eilean Siar (Western Isles)	6,3	89,9	4	6	881	306770	0,3	6,9	9	4,8	5,6
UKM65 Orkney Islands	2,6	37,5	1	9	838	100568	0,8	20,0	9	6,0	6,6
UKM66 Shetland Islands	2,3	32,8	1	9	961	144873	0,7	15,9	9	7,0	7,4
European Union (27 countries)	7	100	5	5	18001045	4,32E+08	4,2	100,0	5	5,0	5,0

Table 3: Descriptive statistics for State 4 and State 5 Indexes, GDP/capita and Change Index

Islands code		GDP (EU=100) 2006	State 4	State 5	Change index
EU27	N	1	1	1	1
	Mean	100,0	5,0	5,0	5,0
	Median	100,0	5,0	5,0	5,0
	Minimum	100,0	5,0	5,0	5,0
	Maximum	100,0	5,0	5,0	5,0
Member States with Islands	N	11	11	11	11
	Mean	109,6	4,99	4,8	5,6
	Median	104,1	5,0	5,2	6,3
	Minimum	65,3	4,0	4,0	2,3
	Maximum	122,9	6,8	6,6	8,0
Island Regions (NUTS 2 or 3)	N	26	26	26	26
	Mean	78,4	3,48	3,66	5,1
	Median	84,3	4,3	5,0	5,0
	Minimum	59,2	2,3	2,4	2,0
	Maximum	146,7	7,3	7,6	8,3

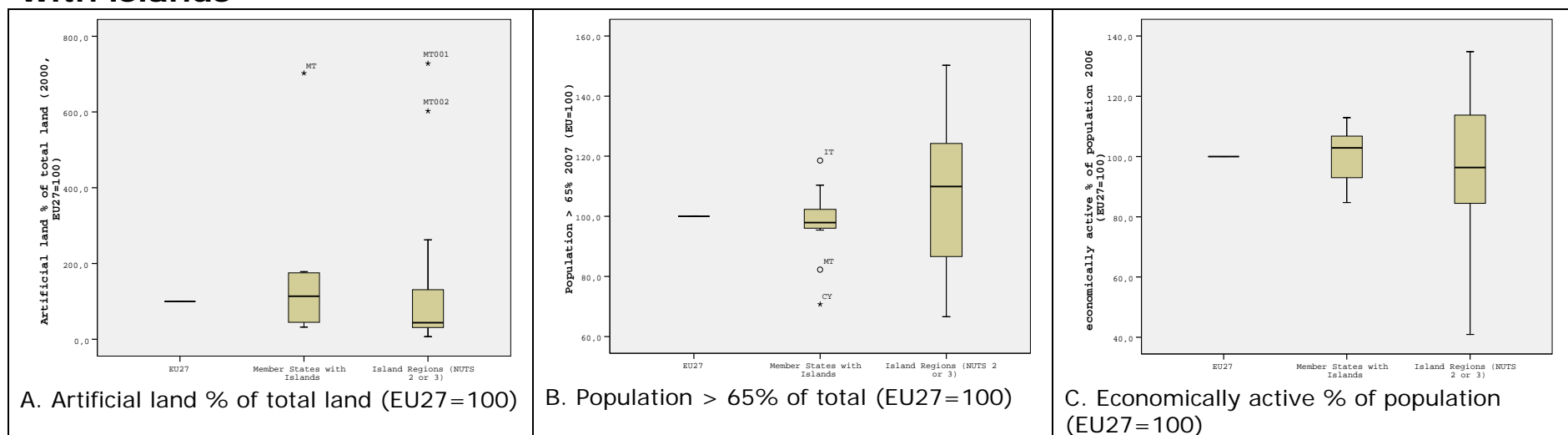
Figure 1: Boxplots of GDP/capita, State 4 Index and State 5 Index for NUTS 2 or 3 island regions and Member States with islands



Comparing the three boxplots we can observe the following:

- For the GDP/capita islands median is lower than EU-27 and States with islands indices; it is the same for the State 4 but not for the State 5 index where the median is almost at the same level for all of them
- The islands' mean for the 3 indexes is significantly lower than the EU-27 and the States one. The mean for Islands and States is weighted by their population.
- For the GDP/capita the extreme values (except Aland) for States and Islands are very close to each other; is not the same for State 4 and State 5 where the minimum and the maximum values have a very important variation

Figure 2: Boxplots of Artificial land % of total land, Population > 65% of total and Economically active % of population for NUTS 2 or 3 island regions and Member States with islands



- The percentage of artificial land on the total surface in islands is lower than in the rest of Europe with one extreme exception: Malta
- Values for the % of population over 65 years on islands have a variance significantly higher than for the states and their median is higher than the European average and the States median.
- Values for economically active population have also a very high variance but the median is lower than the European average and the States median.

Figure 3: Scatterplots of State 4, State 5, GDP/capita and Change Index for NUTS 2 or 3 island regions and Member States with islands

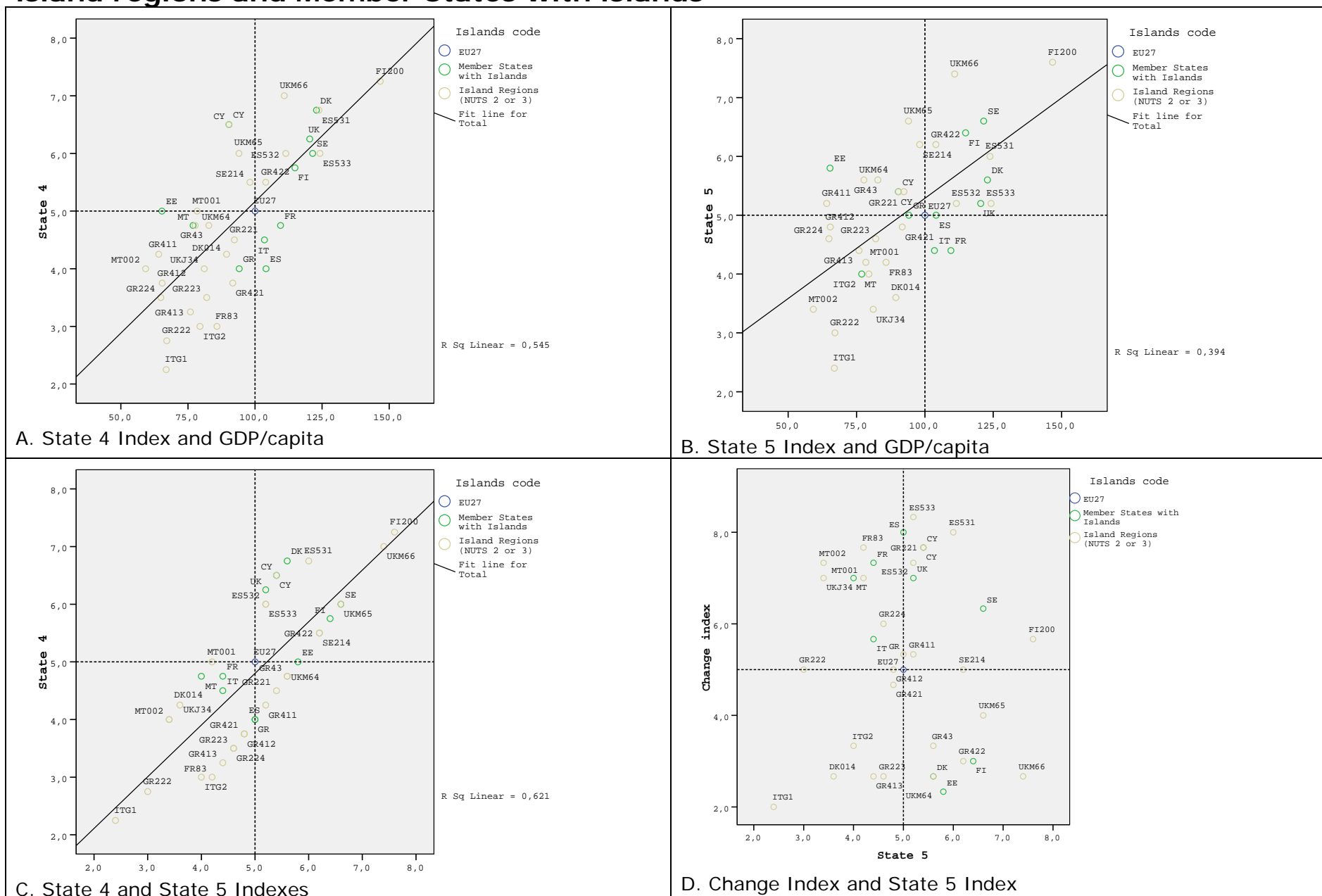


Table 4: Correlation matrix for selected State indicators, State 4, State 5 and Change Indexes

Correlations

		GDP (EU=100) 2006	Artificial land % of total land (2000, EU27=100)	State 4	State 5	Change index
GDP (EU=100) 2006	Pearson Correlation	1	-,208	,738**	,628**	,210
	Sig. (2-tailed)		,210	,000	,000	,205
	N	38	38	38	38	38
Artificial land % of total land (2000, EU27=100)	Pearson Correlation	-,208	1	,028	-,395*	,375*
	Sig. (2-tailed)	,210		,869	,014	,020
	N	38	38	38	38	38
State 4	Pearson Correlation	,738**	,028	1	,788**	,189
	Sig. (2-tailed)	,000	,869		,000	,255
	N	38	38	38	38	38
State 5	Pearson Correlation	,628**	-,395*	,788**	1	-,080
	Sig. (2-tailed)	,000	,014	,000		,632
	N	38	38	38	38	38
Change index	Pearson Correlation	,210	,375*	,189	-,080	1
	Sig. (2-tailed)	,205	,020	,255	,632	
	N	38	38	38	38	38

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5: Indicators, classes and calculation of the Change Index

Geo name	Population change rate 2000-06%	Population change rate 2000-06% (EU27 =100)	Population change rate 2000-06% (EU27 =100) classes	Active change 2000-6%	Econo-mically active 2000-6 change rate%	Econo-mically active 2000-6 change rate% (EU27 =100)	Econo-mically active 2000-6 change rate% (EU27 =100) classes	GDP/ capita 2000 (EU27 =100)	GDP/ capita 2006 (EU27 =100)	GDP/ capita change 2000-6 % (EU27 =0)	GDP/ capita change 2000-6 % (EU27=0) classes	Change index
CY Cyprus	1,4	496,1	9	21,1	3,0	406,7	9	88,5	90,3	1,8	5	7,7
DK Denmark	0,2	82,2	3	2,6	0,4	50,4	1	99,7	89,5	-10,3	4	2,7
DK014 Bornholm	0,2	82,8	3	0,9	0,1	18,3	1	131,4	123,3	-8,1	4	2,7
EE Estonia	-0,2	-83,3	1	3,6	0,5	70,1	2	113,4	110,2	-3,2	4	2,3
ES Spain	1,2	419,7	9	19,8	2,8	382,4	9	96,9	104,2	7,4	6	8,0
ES53 Illes Balears	2,4	859,1	9	29,9	4,3	575,6	9	119,4	114,4	-5,0	5	7,7
ES531 Eivissa y Formentera	3,5	1227,5	9	26,6	3,8	512,3	9	112,8	124,2	11,4	6	8,0
ES532 Mallorca	2,4	827,3	9	30,2	4,3	581,3	9	120,7	111,4	-9,3	4	7,3
ES533 Menorca	2,0	686,0	9	32,1	4,6	618,1	9	118,5	124,2	5,6	7	8,3
FI Finland	0,2	76,3	3	2,3	0,3	43,7	1	116,8	114,8	-1,9	5	3,0
FI20 Åland	0,5	187,7	9	4,3	0,6	83,2	3	145,5	147,0	1,5	5	5,7
FR France	0,5	192,6	9	9,9	1,4	190,6	9	115,2	109,7	-5,4	4	7,3
FR83 Corse	1,5	536,6	9	37,0	5,3	712,6	9	86,9	86,0	-0,9	5	7,7
GR Greece	0,3	92,8	4	6,0	0,9	114,9	6	83,8	94,1	10,3	6	5,3
GR22 Ionia Nisia	0,9	323,0	9	3,9	0,6	74,5	2	74,9	74,2	-0,7	5	5,3
GR221 Zakynthos	0,5	181,8	9	25,6	3,7	492,9	9	93,2	92,4	-0,8	5	7,7
GR222 Kerkyra	1,5	518,1	9	-0,2	0,0	-3,4	1	72,3	67,4	-4,9	5	5,0
GR223 Kefallinia	0,1	34,9	1	-41,3	-5,9	-795,6	1	71,2	82,2	11,0	6	2,7
GR224 Lefkada	0,2	80,1	3	72,9	10,4	1405,1	9	59,2	64,8	5,7	6	6,0
GR41 Voreio Aigaio	-0,2	-79,1	1	10,2	1,5	196,6	9	59,2	67,4	8,2	6	5,3
GR411 Lesvos	-0,2	-64,9	1	14,6	2,1	281,9	9	56,5	64,0	7,4	6	5,3
GR412 Samos	-0,3	-100,1	1	20,0	2,9	385,6	9	60,7	65,3	4,5	5	5,0
GR413 Chios	-0,3	-90,7	1	-7,8	-1,1	-150,1	1	62,8	75,8	13,0	6	2,7
GR42 Notio Aigaio	0,3	110,8	6	1,3	0,2	24,7	1	97,4	96,2	-1,2	5	4,0
GR421 Dodekanisos	0,4	147,3	9	-0,4	-0,1	-7,4	1	97,9	91,9	-6,0	4	4,7
GR422 Kyklades	0,1	48,1	1	3,8	0,5	74,1	2	96,3	104,2	7,9	6	3,0
GR43 Kriti	0,2	82,9	3	1,1	0,2	20,4	1	77,5	83,1	5,6	6	3,3
IT Italy	0,4	153,5	9	4,6	0,7	88,9	4	116,8	103,8	-12,9	4	5,7
ITG1 Sicilia	0,1	26,4	1	-2,2	-0,3	-42,5	1	73,6	66,9	-6,7	4	2,0
ITG2 Sardegna	0,2	56,3	1	4,9	0,7	95,0	5	88,0	79,7	-8,3	4	3,3
MT Malta	0,5	162,0	9	6,6	0,9	127,4	8	83,2	77,1	-6,1	4	7,0
MT001 Malta	0,4	150,0	9	6,5	0,9	126,0	8	84,8	78,4	-6,4	4	7,0
MT002 Gozo and Comino	0,9	305,0	9	7,6	1,1	146,9	9	64,9	59,3	-5,6	4	7,3
SE Sweden	0,3	103,0	5	9,2	1,3	177,7	9	126,2	121,6	-4,6	5	6,3
SE214 Gotlands län	0,0	0,0	1	12,0	1,7	230,5	9	98,4	98,3	-0,1	5	5,0
UK United Kingdom	0,4	146,0	9	6,2	0,9	119,9	7	118,8	120,3	1,5	5	7,0
UKJ34 Isle of Wight	0,7	240,3	9	6,3	0,9	122,4	7	79,6	81,4	1,8	5	7,0
UKM64 Western Isles	-0,2	-81,8	1	-18,8	-2,7	-362,2	1	67,5	78,0	10,4	6	2,7
UKM65 Orkney Islands	0,3	101,8	5	-2,5	-0,4	-47,7	1	85,9	94,1	8,2	6	4,0
UKM66 Shetland Islands	-0,2	-66,7	1	1,8	0,3	34,7	1	96,9	111,0	14,2	6	2,7

European Union (27 countries)	0,3	100,0	5	5,2	0,7	100,0	5	100	100,0	0,0	5	5,0
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Figure 4: Boxplot of Change Index for NUTS 2 or 3 island regions and Member States with islands

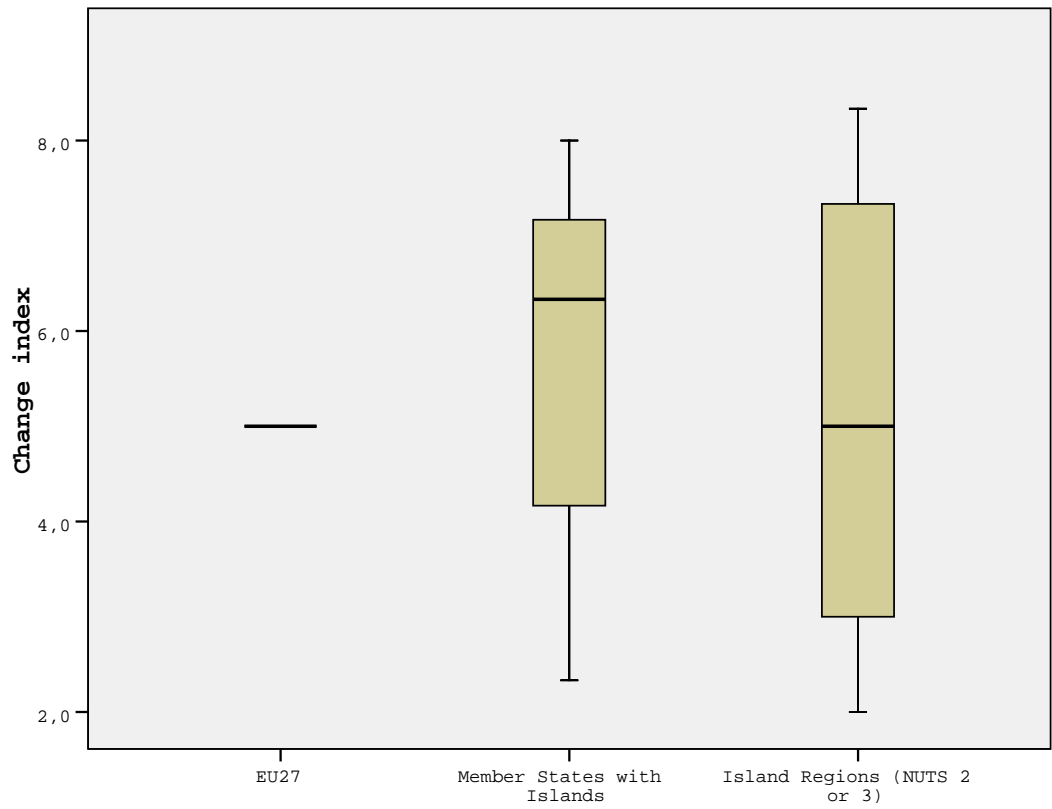


Table 6A: Indicators, classes and calculation of the Attractiveness Direct Index

Geo name	Agglomeration Economies (FUA)	FUAave classes	multimodal Accessibility	Access multimodal classes	Attractiveness Direct
CY Cyprus	1,75	4	51	2	3
DK014 Bornholm	1	2	94	4	3
ES53 Illes Balears			99	5	
ES531 Eivissa y Formentera	1,7	4	nd	*5	4,5
ES532 Mallorca	2,9	6	nd	*5	5,5
ES533 Menorca	No FUA	0	nd	*5	2,5
FI20 Åland	1,4	3	76	3	3
FR83 Corse	1,35	3	76	3	3
GR221 Zakynthos	No FUA	0	70	3	1,5
GR222 Kerkyra	1,1	3	80	4	3,5
GR223 Kefallinia	No FUA	0	48	2	1
GR224 Lefkada	No FUA	0	58	2	1
GR411 Lesvos	1,1	3	72	3	3
GR412 Samos	No FUA	0	68	3	1,5
GR413 Chios	0,9	2	65	3	2,5
GR421 Dodekanisos	2	4	79	3	3,5
GR422 Kyklades	1,1	3	67	3	3
GR43 Kriti	1,6	3	61	3	3
ITG1 Sicilia	0,9	2	65	3	2,5
ITG2 Sardegna	1	2	65	3	2,5
MT001 Malta	2,9	6	83	4	5
MT002 Gozo and Comino	No FUA	0	71	3	1,5
SE214 Gotlands län	1,4	3	70	3	3
UKJ34 Isle of Wight	No FUA	0	96	4	2
UKM64 Western Isles	No FUA	0	24	1	0,5
UKM65 Orkney Islands	No FUA	0	29	1	0,5
UKM66 Shetland Islands	No FUA	0	24	1	0,5

- As data for accessibility exist only for Illes Balears as region, in order to estimate the attractiveness index we considered that the 3 NUTS3 regions have same accessibility.

Table 6B: Indicators, classes and calculation of the Attractiveness Indirect Index

Geo name	low educational level	low educational level (EU27 =100)	low educational level inverse classes	R&D expenditure %GDP 2008 (NUTS 2 different years)	R&D expenditure %GDP 2008 (EU27 =100) (NUTS 2 different years)	R&D expenditure %GDP 2008 classes (NUTS 2 different years) classes	Households with broadband access % 2008	Households with broadband access % 2008 (EU=100)	Households with broadband access % 2008 (EU=100) classes
CY Cyprus	32,6	112,0	4	0,46	24,2	1	33	67,3	2
DK Denmark	17,3	59,5	9	2,72	143,2	9	74	151,0	9
EE Estonia	10,9	37,5	9	1,29	67,9	2	54	110,2	6
ES Spain	51,2	175,9	1	1,35	71,1	2	45	91,8	4
ES53 Illes Balears	55,6	191,1	4	0,33	17,4	1	50	102,0	5
FI Finland	21,2	72,9	8	3,73	196,3	9	66	134,7	8
FI20 Åland	29,5	101,4	5	0,16	8,4	1	64	130,6	8
FR France	33,6	115,5	3	2,2	115,8	7	57	116,3	7
FR83 Corse	64,2	220,6	1	0,22	11,6	1	57	116,3	7
GR Greece	40	137,5	1	0,58	30,5	1	22	44,9	1
GR22 Ionia Nisia	57,2	196,6	1	0,16	8,4	1	18	36,7	1
GR41 Voreio Aigaio	47,7	163,9	1	0,48	25,3	1	18	36,7	1
GR42 Notio Aigaio	48,1	165,3	1	0,15	7,9	1	18	36,7	1
GR43 Kriti	44,6	153,3	1	0,14	49,5	1	18	36,7	1
IT Italy	49,3	169,4	1	1,18	62,1	1	31	63,3	1
ITG1 Sicilia	56,7	194,8	1	0,8	42,1	1	22	44,9	1
ITG2 Sardegna	58,9	202,4	1	0,58	30,5	1	27	55,1	1
MT Malta	74,7	256,7	1	0,54	28,4	1	55	112,2	6
SE Sweden	16,5	56,7	8	3,75	197,4	9	71	144,9	9
UK United Kingdom	14,8	50,9	9	1,88	98,9	5	62	126,5	8
European Union (27 countries)	29,1	100,0	5	1,9	100,0	5	49	100	5

Table 6B (continued): Indicators, classes and calculation of the Attractiveness Indirect Index

Geo name	Unemployment rate total 15-24 2008	Unemployment rate total 15-24 2008 (EU27 =100)	Unemployment rate total 15-24 2008 (EU27 =100) inverse classes	Governance	Attractiveness Indirect
CY Cyprus	9	57,7	9	6	4,4
DK Denmark	7,6	48,7	9		9,0
EE Estonia	12	76,9	7		6,0
ES Spain	24,6	157,7	1		2,0
ES53 Illes Balears	24,3	155,8	1	8	3,8
FI Finland	16,5	105,8	4		7,3
FI20 Åland	10,6	67,9	8	8	6,0
FR France	19	121,8	3		5,0
FR83 Corse	18	115,4	3	5	3,4
GR Greece	22,1	141,7	1		1,0
GR22 Ionia Nisia	26,7	171,2	1	4	1,6
GR41 Voreio Aigaio	20,2	129,5	2	4	1,8
GR42 Notio Aigaio	14,9	95,5	5	4	2,4
GR43 Kriti	13,9	89,1	6	3	2,2
IT Italy	21,3	136,5	1		
ITG1 Sicilia	39,3	251,9	1	2	1,2
ITG2 Sardegna	36,8	235,9	1	2	1,2
MT Malta	12,2	78,2	7	4	3,8
SE Sweden	20,2	129,5	2		7,0
UK United Kingdom	15	96,2	5		6,8
European Union (27 countries)	15,6	100,0	5		5,0

Table 6C: Indicators, classes and calculation of the Attractiveness Potential Index

Geo name	Land under NATURA 2000 (km2)	Land under NATURA 2000 % of total	Land under NATURA 2000 % of total (EU27=100)	Land under NATURA 2000 % of total (EU27=100) classes	Density of monuments	Cultural indicator	Attractiveness Potential Index
CY Cyprus	74276	8,7	61,3	1	0,0023	1	1
DK Denmark	423639	9,9	69,7	2			
DK014 Bornholm	8034	13,5	95,1	5	0,2396	4	4,5
EE Estonia	794721	18,3	128,8	8			
ES Spain	13880379	27,4	193,2	9			
ES53 Illes Balears	111051	21,8	153,5	9	0,5668	5	7
ES531 Eivissa y Formentera							
ES532 Mallorca							
ES533 Menorca							
FI Finland	4959995	14,7	103,5	5			
FI20 Åland	2942	1,9	13,4	1	0,0026	1	1
FR France	4972249	9,1	63,8	1			
FR83 Corse	114727	13,2	92,7	4	0,0306	2	3
GR Greece	2595058	19,8	139,1	9			
GR221 Zakynthos	5176	12,7	89,4	4	2,3124	8	6
GR222 Kerkyra	5875	9,6	67,6	2	4,3881	9	5,5
GR223 Kefallinia	9477	10,5	73,9	2	2,0741	7	4,5
GR224 Lefkada	5434	13,6	95,8	5	0,0000	1	3
GR411 Lesvos	45372	21,5	151,4	9	1,3064	6	7,5
GR412 Samos	27446	27	190,1	9	2,4110	8	8,5
GR413 Chios	32265	35,1	247,2	9	2,0745	7	8
GR421 Dodekanisos	92107	28,9	203,5	9	3,1097	9	9
GR422 Kyklades	70878	21,6	152,1	9	5,4702	9	9
GR43 Kriti	272314	32,8	230,8	9	1,6877	8	8,5
IT Italy	5064396	16,8	118,4	7			
ITG1 Sicilia	407861	15,9	111,7	6	1,3136	8	7
ITG2 Sardegna	385255	20,0	141,1	9	0,5840	7	8
MT Malta	5066	14,5	102,1	5			
MT001 Malta	4086	14,9	104,9	5	0,0400	2	3,5
MT002 Gozo and Comino	980	13,2	93,0	4	0,0403	2	3
SE Sweden	7670683	17,1	120,2	7			
SE214 Gotlands län	16020	4,8	33,8	1	1,1947	6	3,5
UK United Kingdom	1880238	7,7	54,2	1			
UKJ34 Isle of Wight	3344	6,5	45,8	1	0,3013	5	3
UKM64 Western Isles	99765	18,3	128,9	8	0,0670	2	5
UKM65 Orkney Islands	21849	12,1	85,2	4	0,3681	5	4,5
UKM66 Shetland Islands	22651	8,5	59,9	1	0,2531	4	2,5
European Union (27 countries)	61090938	14,2	100,0	5			

Correlations between Attractiveness Direct and Indirect composite index and State 4 & 5 indexes

		Average attractiveness	State 4	State 5
Average attractiveness	Pearson Correlation	1	,819(**)	,668(*)
	Sig. (2-tailed)		,002	,025
	N	11	11	11
State 4	Pearson Correlation	,819(**)	1	,858(**)
	Sig. (2-tailed)	,002		,001
	N	11	11	11
State 5	Pearson Correlation	,668(*)	,858(**)	1
	Sig. (2-tailed)	,025	,001	
	N	11	11	11

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

