CROSS-NATIONAL CLUSTERS BASED ON TRADITIONAL/SECULAR-RATIONAL VALUES AND SURVIVAL/SELF-EXPRESSION VALUES AND THEIR USE FOR STUDYING THE BETWEEN-COUNTRY SIMILARITIES AND DIFFERENCES IN EUROPE

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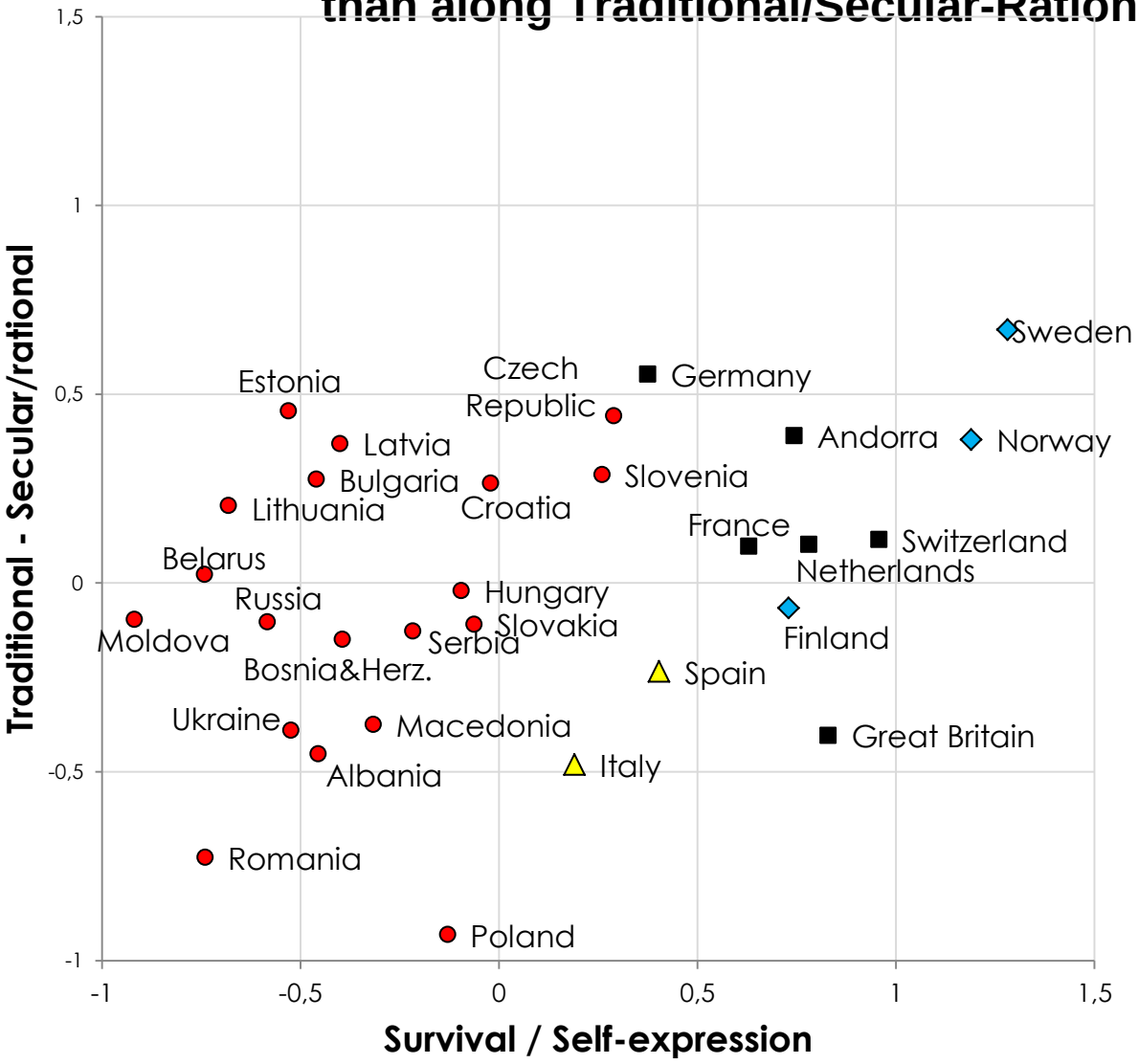
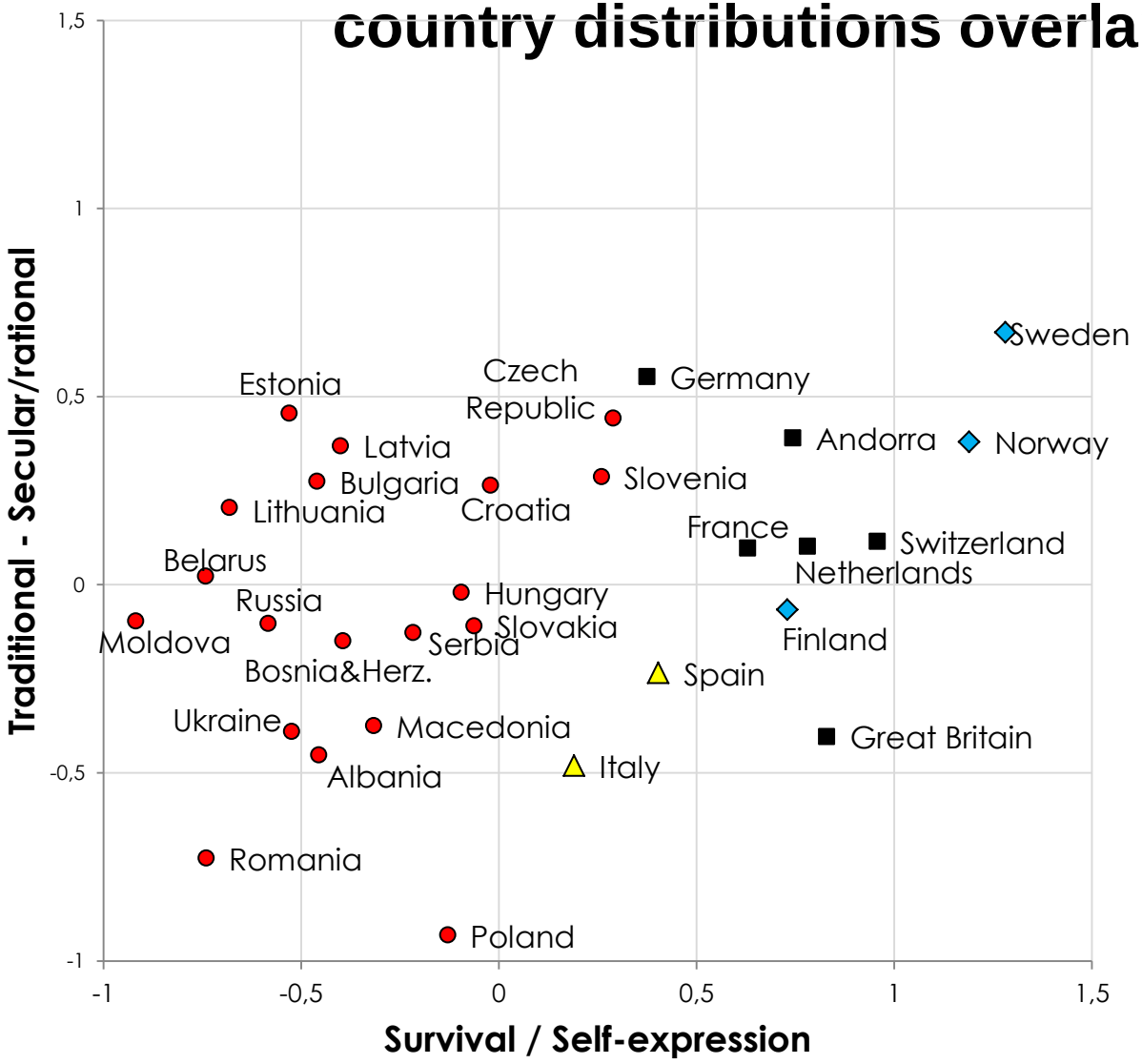
Background and rationale

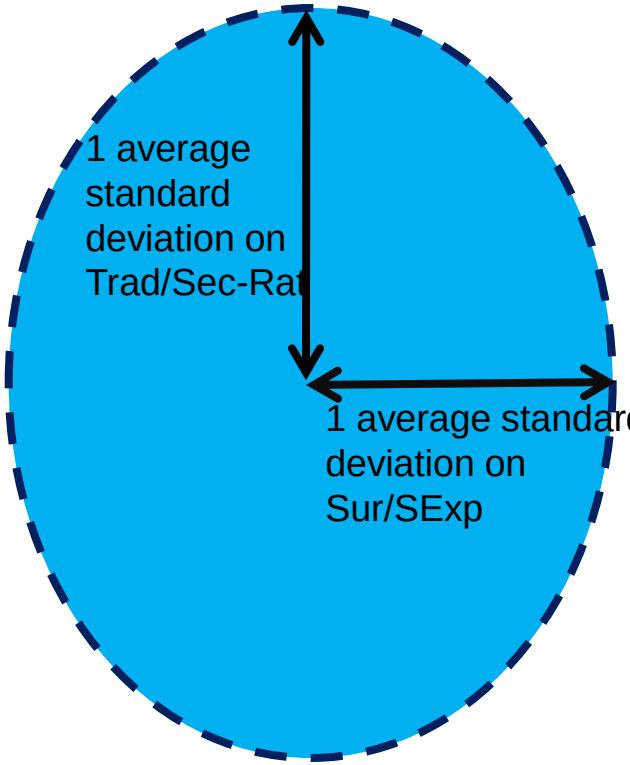
- In previous studies many European countries (as well as the countries from other parts of the world) have been located on the world value maps, so that we could see the between-country proximity and distances. In those country level comparisons each country was represented by an average resident drawn as a point on the value map. Our goal in this presentation is to enrich the country level view by the comparisons taking into account the within-country value diversities.
- Ronald Inglehart and Christian Welzel in their recent seminal publication (2010) emphasize the fact that on the global level “cross-national differences dwarf the differences within given societies”. Still there are some empirical results that emphasize within-country value differences and between-country value consensus (R.Fischer and Sh.Schwartz, 2010, in press)
- So, I think that the within-country differences may be of interest, especially when we deal with rather homogeneous set of European countries

National averages in the two-dimensional value space. There is more variance between European countries along the Survival/Self-expression than along Traditional/Secular-Rational dimension



Average standard deviations of *WITHIN-COUNTRY* distributions of the value dimensions scores. All the country distributions overlap (WVS)





The key hypothesis

The all-European value clusters based on the 10 value items measuring Traditional/Secular-Rational Values and Survival/Self-Expression Values will be a feasible instrument to demonstrate between-country value similarities and differences in Europe, i.e.:

1) All the countries will have the representatives of all the clusters in their populations;

2) Different patterns of within-country value distributions will evolve and the main cleavage will be between Nordic and Western European countries on the one part and Postcommunist and Mediterranean countries on the other part.

Data

Data for 30 European countries from the integrated World Values Survey data base. For each country we took the most recent data available, for 18 countries the data came from the 2005-2007 wave of the WVS. The population weight was applied to the data. N=35431 respondent in the non-weighted file.

- Nordic countries: Finland (2005), Norway (2007), Sweden (2006).
- Western European countries: Andorra (2005), France (2006), Germany (2006), Great Britain (2005), Netherlands (2006), Switzerland (2007).
- Mediterranean countries: Italy (2005), Spain(2007).
- Ex-communist countries: Albania (2002), Belarus (1996), Bosnia and Herzegovina (2001), Bulgaria (2006), Croatia (1996), Czech Republic (1998), Estonia (1996), Hungary (1998), Latvia (1996), Lithuania (1997), Macedonia (2001), Moldova (2006), Poland (2005), Romania (2005), Russian Federation (2006), Serbia (2006), Slovakia (1998), Slovenia (2005), Ukraine (2006).

Core variables

10 value variables that compose the Traditional/Secular-Rational dimension and Survival/Self-Expression dimension in the WVS and were first described as the “minimal set” for tapping these value dimensions by R. Inglehart and W. Baker [Inglehart, Baker, 2000, p. 24-25].

The basic procedures for the computation of these variables are taken from the Web-attachment to Inglehart and Welzel book “Modernization, Cultural Change, and Democracy. *The Human Development Sequence*” [Inglehart, Welzel, 2005b]. We have reversed the original polarity of the ten variables so that the higher individual scores correspond to the stronger commitment to Secular-Rational or Self-Expression values.

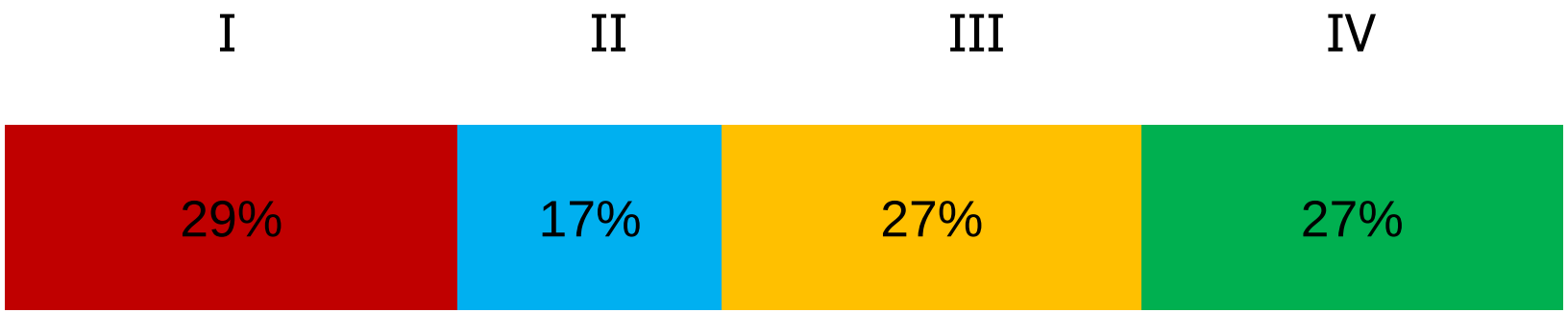
Two value factors are reproduced in the European data set (with two minor "deviations")

	Factor loadings	
	Survival/Self-Expression factor (explains 19% of variance)	Traditional/Secular-Rational factor (explains 18% of variance)
God is not at all important in R's life	.24	.62
Teach independence and determination rather than obedience and faith	.26	.56
Abortion is always justifiable	.43	.55
Respondent has no sense of national pride	-.19	.58
Respondent disfavours more respect for authority	-.21	.40
4-item materialist/postmaterialist values index (priority to self-expression and influence on government decisions over economic and physical security)	.55	.08
Respondent describes self as very happy	.60	-.27
Homosexuality is always justifiable	.65	.41
Respondent has signed or would sign petitions	.61	.07
Most people can be trusted	.33	.01

The two differences from the canonical factor matrix

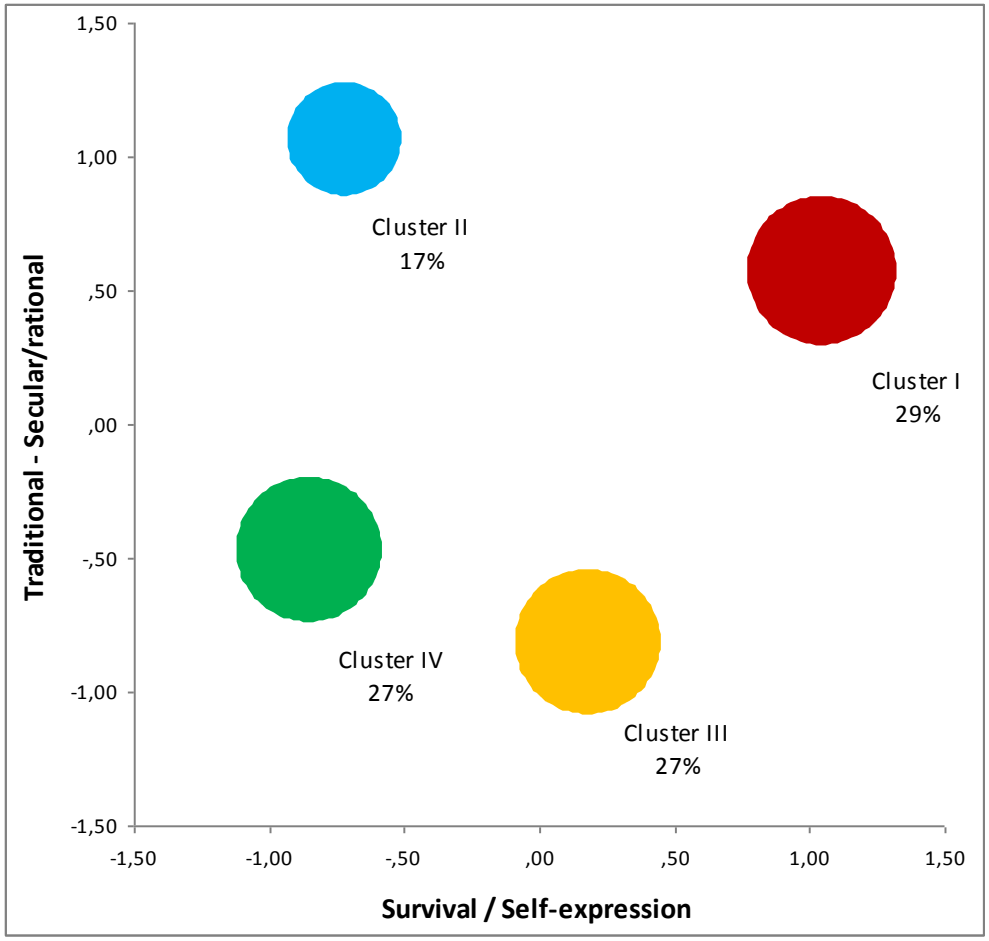
- 1) Our two European factors appeared to be *almost equal* in terms of variance described. In Inglehart and Baker factor matrix based on the individual data collected in 65 societies from all over the world [Inglehart, Baker, 2000, p.24] the total variance explained by two factors was approximately the same as in our matrix (39% versus 37% in our case). But the distribution of this total variance between two factors was quite different: in the Inglehart and Baker factors the Traditional/Secular-Rational factor described twice as much variance as the Survival/Self-Expression factor! This difference between European and the World factor variances is explained by the fact that Europe is more even in [high] rational-secularity than the world as a whole.
- 2) Both of the variables “Abortion is always justifiable” and “Homosexuality is always justifiable” have remarkable loadings on both factors. In the canonical factor matrices these variables are “divided” between different factors: the Abortion variable has a remarkable loading on the Traditional/Secular-Rational factor and the Homosexuality variable has a remarkable loading on the Survival/Self-Expression factor.

All the European respondents studied were divided into four value clusters (types) based solely on individual scores of 10 value items
(K-means cluster analysis)

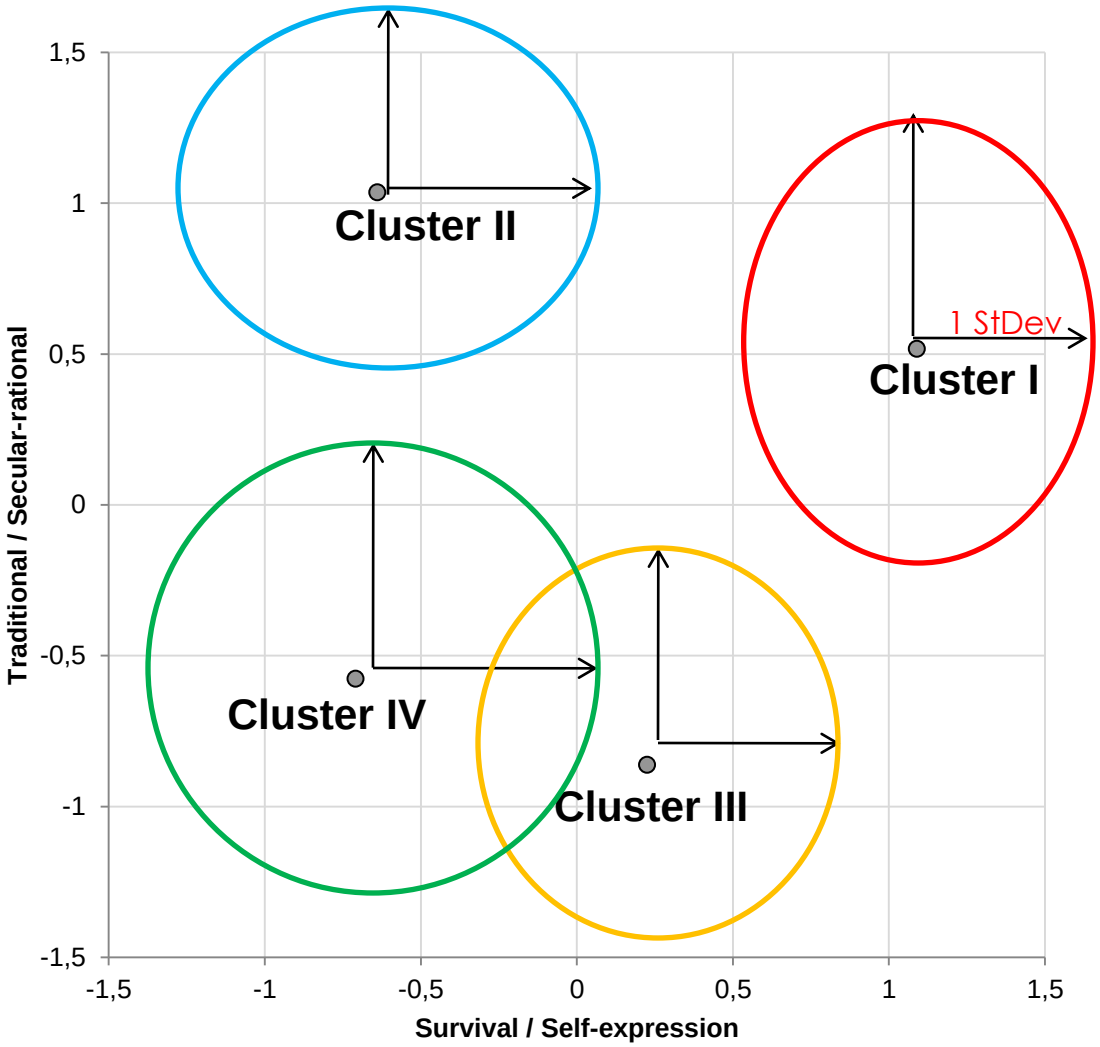


The proportion of respondents in each cross-national European cluster

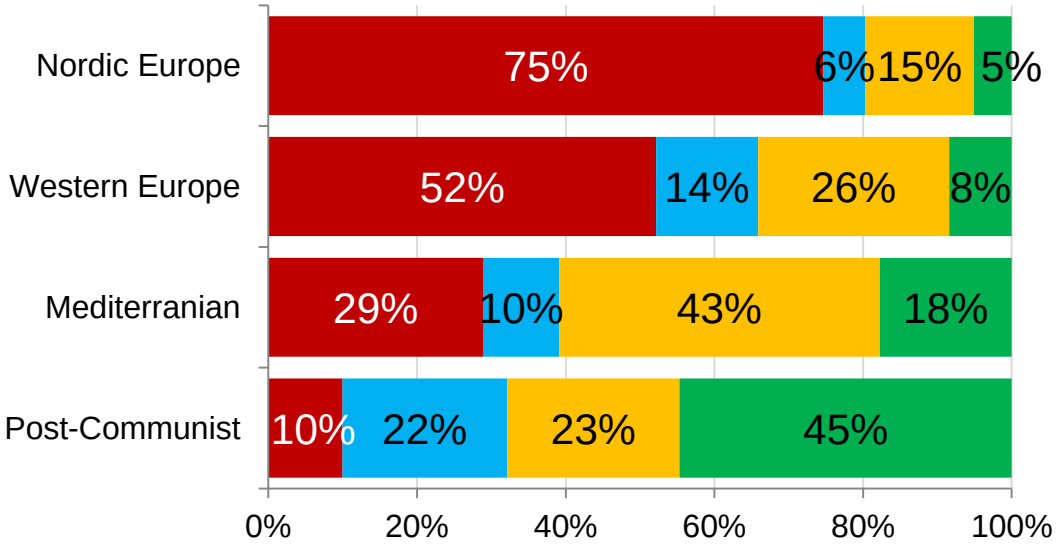
CROSS NATIONAL VALUE CLUSTERS (TYPES) IN THE TWO-DIMENSIONAL VALUE SPACE

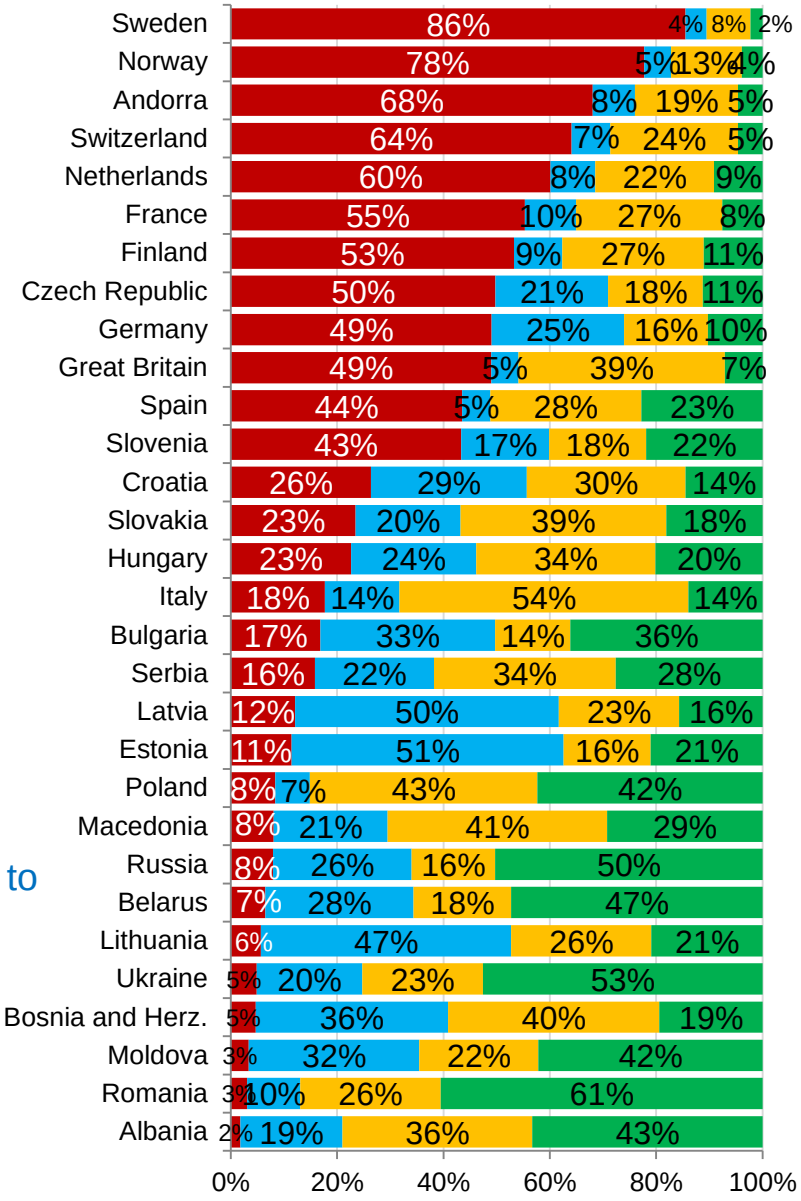


Standard deviations of *WITHIN-CLUSTER* distributions of the value dimensions scores



LOOK AT THE COLUMNS: There are representatives of all the countries in each of the four value clusters (types)





Cluster I – an extremely high commitment to Self-expression and above-average commitment to Secular/Rational values

Cluster II – an extremely high commitment to the Secular/Rational values and rather strong commitment to the Survival values

Cluster III – an extremely high commitment to the Traditional values and an average score on the axis "Survival – Self-expression"

Cluster IV – an extremely high commitment to Survival and above-average commitment to Traditional values.

Country composition of each cluster

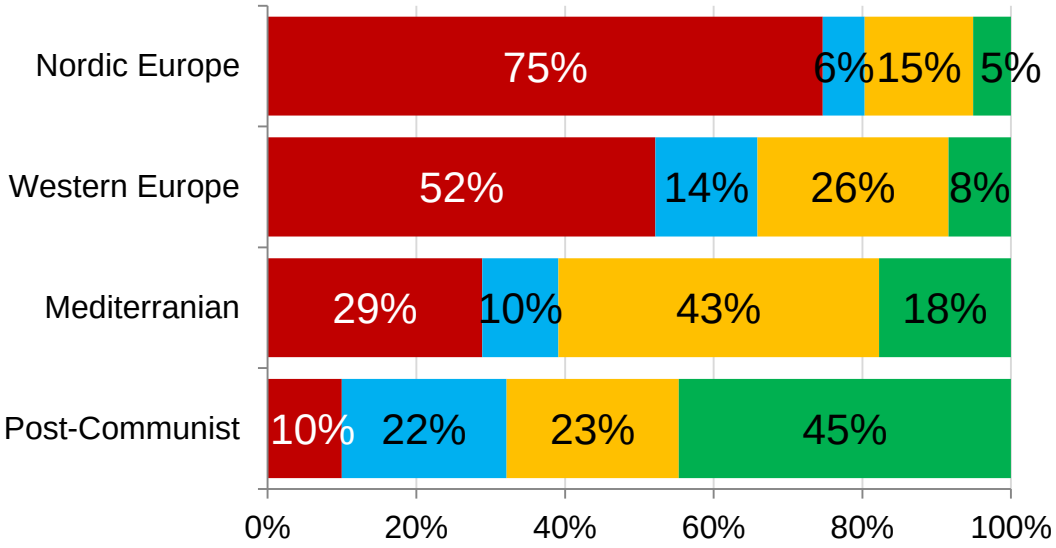
- **Cluster I** - The leaders - Sweden, Norway, Andorra and Switzerland, contribute at least 64% of their populations. Outsiders - postcommunist countries (Albania, Romania, Moldova, Bosnia and Herzegovina, Ukraine, Lithuania, Belarus, Russia, Macedonia and Poland), contribute not more than 10%.
- **Cluster II** - The leaders - ex-communist Baltic countries (Estonia, Latvia and Lithuania), contribute about half of its population! (Other postcommunist countries also did remarkable contributions.) Outsiders - the Nordic and West European countries, no more than 10% of their population.
- **Cluster III –** The leaders are Italy and Poland (54 and 43% of population) as well as Macedonia, Bosnia and Herzegovina, Great Britain and Slovakia, and the smallest contribution comes from Sweden and Norway (8 and 13%).
- **Cluster IV** - the biggest shares come from postcommunist countries (Romania, Ukraine, Russia, Belarus, Albania, Moldova and Poland contribute from 61 to 42% of their population) and the smallest – from the Western and Nordic countries (none of them contributes more than 11% of their population)

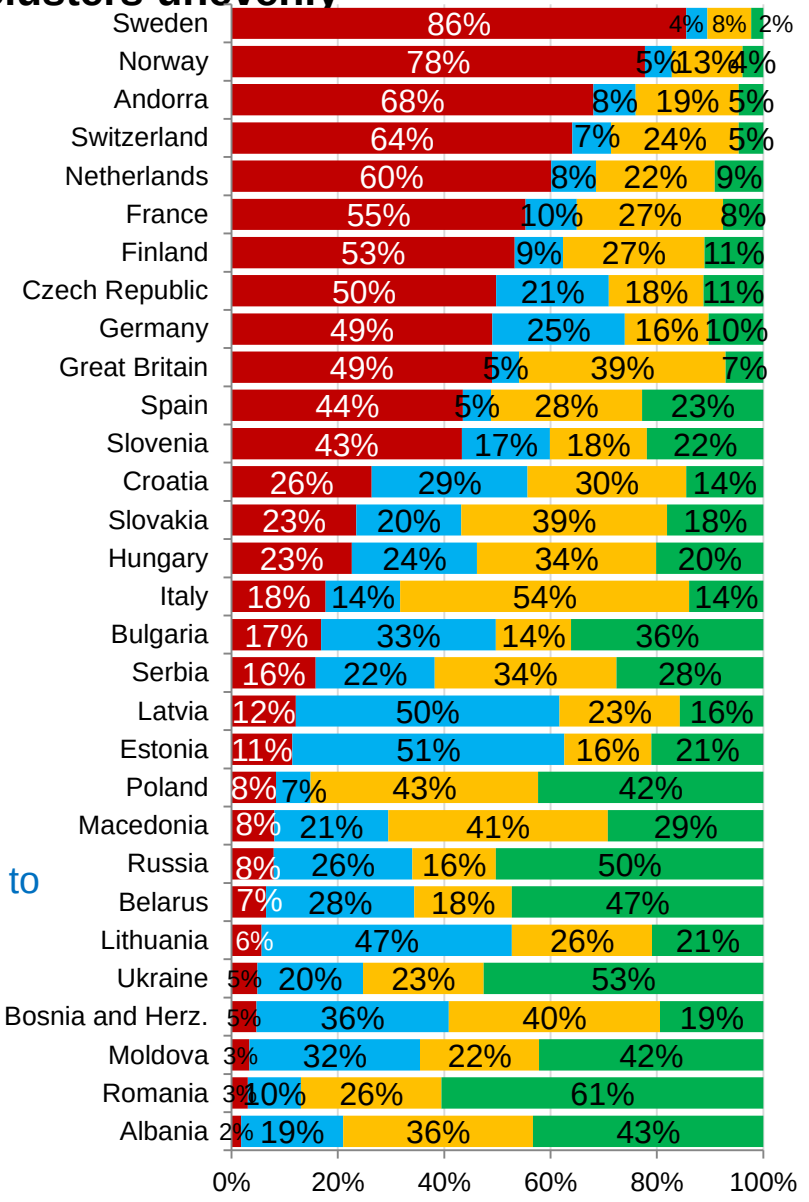
Leaders and outsiders of the clusters I, II and IV are often the same countries

The cluster I membership in a given country has strong negative and significant correlations with the clusters II and IV memberships:

$r_{I\text{-}II} = -.62$; $r_{I\text{-}IV} = -.78$ (N=30)

<u>LOOK AT THE ROWS:</u> The whole set of value clusters is represented in each country. The cross-country differences evolve due to the fact that people in different countries are distributed between these clusters unevenly





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Cluster III – an extremely high commitment to the Traditional values and an average score on the axis "Survival – Self-expression"

Cluster IV – an extremely high commitment to Survival and above-average commitment to Traditional values.

Between-country similarity and differences through the countries cluster structure

- The cluster approach helps to discover the ***value similarity*** between populations of different countries. In each country there is at least the small share of people similar to each value type represented in any other country so every country has some *commonality* with each of the others and this fact creates the value infrastructure for international (global) communication. For the Russian value *minority* who belongs to cluster I (8%) there are more chances to find the affinity group in such countries as Sweden and In turn, Sweden and Norway have small population fractions closer in their values to Russian majorities than to value majority existed in their own countries.
- Still the cluster approach helps to detect ***the value difference*** between countries and country categories also.

  a) The cross-country differences in ***shares*** of different clusters

  b) The cross-country differences in ***ratio*** of various cluster membership:

  there are more Survivals than Expressionists and equal shares of Rationalists and Traditionalists in the ex-communist countries, but in the Nordic, Western European and Mediterranean countries the first ratio is inverse and the second indicates the Traditionalists' predominance.

The people in each country are distributed between value clusters unevenly

Value majority(ies) and value minority(ies) may be found in each country and each country category studied. Value minority(ies) are different in their values from the value type(s) predominant in the country and their existence may have important implications for the society social and political life.

The highest inequality of within-country cluster membership is characteristic for the Nordic countries (but not for ex-communist and Mediterranean countries as it happened to be in our previous analysis based on Schwartz values).

Conclusion

1. The automatic classification (cluster analysis) of all the European respondents based on their ten values which compose Traditional – Secular/Rational and Survival – Self-expression value dimensions have been built. This automatic procedure classifies respondents from all the countries taking into account just their similarities and dissimilarities in values and ignoring their country of residence.

2. As hypothesized the set of cross-national clusters appeared to be an efficient instrument to grasp the between-country overlapping as well as between-country differences in values.

As in our previous study based on Sh. Schwartz values measured by the European Social Survey we have detected in the current study that each of the thirty European countries embraces the representatives of all four value types (clusters) and this is the base for *commonality* between countries. And the cross-country value differences arise due to the fact that people in different countries (country categories) are distributed between these types not in the same way.

Conclusion - II

3. Value majority(ies) and value minority(ies) may be found in each country and each country category studied. Value minority(ies) are different in their values from the value type(s) predominant in the country and their existence may have important implications for the society social and political life.

Different *patterns* of within-country cluster distributions evolve in the current study, some of them being more uneven than the others. The highest inequality of within-country cluster membership is characteristic for the Nordic countries (but not for ex-communist and Mediterranean countries as it happened to be in our previous analysis based on Schwartz values).

4. Agenda for the future:

a) the extension of the analysis to the broader set of countries (EVS set of the European countries or the Global set of the countries involved in the WVS);

b) the refinement of the cross-country comparisons based on their cluster structure

c) looking at the clusters social composition.

Thanks for your attention!