

Toward a unified Europe?
Explaining regional differences in value patterns
by economic development, cultural heritage and historical shocks

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Abstract

The concept of the 'Europe of the regions' has given rise to the question of whether there is a process of cultural unification discernible among European regions. This paper reports the results of an empirical analysis of cultural differences among a panel of 55 European regions. Modernization theorists argue that cultural convergence can be expected, whereas culturalist theorists claim there are processes of path dependence. Using existing measures of culture we find that economic development is an important driver for value change, but that cultural (religious) heritage leaves a permanent imprint. In addition our results suggest that historical shocks influence the process of cultural change.

Keywords: Culture, Path dependence, Europe, Modernization theory, Culturalist theory

JEL codes: A130, O180, R100

INTRODUCTION

The extensive deliberations over the draft constitution and the breakdown of the Brussels summit, which was meant to adopt a new constitutional treaty for the European Union, has led to the umpteenth crisis in the history of European integration. The proximal cause of the collapse was a political row about voting rights. Some commentators have, however, pointed to the overriding importance of a distal cause, continuing cultural diversity. When Mr. Giscard d'Estaing and his 12-strong presidium issued the first 16 articles of the draft constitution in early 2003, they were deluged with over 1,000 proposed amendments from all sides. These amendments revealed the great discord and the many difficulties that must be overcome before the dream of Europe as a real constitutional unity can come true.

Whether these difficulties will be overcome is hotly debated. On the one hand there are European zealots who argue that European unity should not only be economic in nature, but also political and cultural. Cultural convergence is in their opinion not only desirable but also inevitable, at least in the end. Modernisation theory provides material for voicing such a far-reaching expectation. On the other hand there are European sceptics who argue that although in the foreseeable future the single market will be deepened an enlarged Europe will still politically resemble General de Gaulle's *l'Europe des états* and will culturally be dominated by a diversity of national heritages. Culturalist theory provides arguments for this expectation.

There is one gap in the debate between European zealots and sceptics, that we find intriguing and want to fill. Both sides in the debate point either to international or national influences, modernisation processes and cultural heritages respectively, and neglect the regional dimension. In our opinion the regional dimension is of more than passing importance if one wants to gain insight into the process of the cultural and political unification of Europe. Both the

modern history of Europe and the emphasis in today's European policy making on the principle of subsidiarity point in that direction.

The national and regional dimension in modern European history

What are the historical reasons for our claim that the regional dimension should not be neglected? One has to realise that neither nation states nor national cultures exist at all times and in all circumstances. They are a contingency, and not a universal necessity (GELLNER, 1983). Regions predated the rise of the nation state and had an impact on how particular nation states took shape. The characteristics of modern nation states as well as national cultures are chiefly products of 19th century Europe and – according to modernisation theory - a by-product of the industrial and commercial revolutions. The decline of older regional and ethnic bonds made it imperative at that time to formulate and inculcate new forms of civic loyalty such as nationalism and patriotism. According to HOBBSBAWN (1990) states and regimes had every reason to reinforce their position with the sentiments and symbols of 'imagined communities'. They spread the image and heritage of the 'nation' and tried to inculcate attachment to it by 'invented traditions'. This does not mean, however, that national bonds and cultures eclipsed regional ones completely. In some countries regions constituted an obstacle to centralised state and nation building, and remained an element in the polity and culture of these countries. In these countries unification happened only at the end of the 19th century (Germany, Italy). In other countries nation building started much earlier than the 19th century (France, Great-Britain, the Netherlands). If the emergence of nation states and national cultures has been a by-product of the modernisation process, then most countries have followed different roads to modernity (cf.

GREENFIELD, 1992). And each road has left at least some elbowroom for regional politics and culture to have an impact on whatever is happening in economy and society.

The national and regional dimension in today's European policymaking

Paradoxically the leeway for regional politics and culture has recently increased because of ongoing modernisation processes, such as economic integration and globalisation. OHMAE (1995), for example, has argued that functional imperatives at the global and European level are breaking down nation states in favour of regional entities. Globalisation and European integration have made some territorially based production factors (especially with regard to Fordist large scale, standardised modes of production for national markets) become less important, enhancing the freedom of firms to choose locations at will. At the same time, however, 'new' regional production factors – such as the availability of not only human, but also cultural and social capital – have become of critical importance (especially for post-Fordist small scale, flexible modes of production for global markets). Therefore a time of globalisation and European integration became also a time of resurgence of regional economies.

The European Commission took advantage of this trend by extending the subsidiarity principle to what it called *l'Europe des regions*. This idea refers to a geographically decentralised, economically competitive and politically pluralist Europe that does not only culturally draw upon European and national identities, but also on regional ones (cf. NEWLANDS, 1995). In praise of this conception BOVENBERG (2003) has argued that although European integration does require some convergence to a homogeneous set of public core values, cultural diversity has advantages too. Cultural pluralism at the national and regional levels increases the potential for intra-European trade and allows Europe to benefit from the specific

strengths of national and regional traditions. The internal market encourages each region to increasingly specialise in its comparative advantages, which are in part shaped by its specific social and cultural capital. CASTELLS (1996, 1998) argues more or less in the same vein. To make the European Union even more of a success the legitimacy of the European institutions must be enhanced. The key element in gradually establishing the European Union's legitimacy, without jeopardising its policymaking capacity, is the ability of its institutions to link up with subnational levels of government, regional and local. This feat can be accomplished by a deliberate extension of the subsidiarity principle, under which the Union institutions only take charge of decisions that lower levels of government, including nation states, cannot assume effectively. This adds dynamism to regions and cities around Europe. Both cities and regions have already established European networks that co-ordinate initiative, and learn from each other, putting into action a novel principle of co-operation and competition. In this way the European Union becomes a network society in statu nascendi, which is a highly dynamic, open system, susceptible to innovating without threatening its balance and characterised by the sharing of authority.

RESEARCH QUESTIONS

The above mentioned arguments put the debate between European zealots and sceptics, modernisation theorists and culturalist about a unifying Europe in a new light. The pivotal question we want to answer in this paper is whether as modernisation theory predicts a process of cultural unification has been going on within Europe in the past decade. We realize that this question is neither original nor under- researched. What is, however, original in our approach and has never been researched before is the regional dimension of this hypothesized cultural

convergence across Europe. What we intend to do in this paper is to study the cultural aspects of a 'Europe of the regions'. We will look for changing and continuing cultural differences across European regions. How can we explain these differences? Is convergence discernible, as the European zealots and modernisation theorists assume, and will regional cultural differences therefore eventually fade away? Or will, as the European sceptics and culturalists suppose, important cultural differences between European regions be preserved and will a 'Europe of the regions' stay as culturally heterogeneous as it is today?

The outline of the paper is as follows. First we sketch the ideas from modernisation and culturalist theories that are relevant for answering our research questions. Next we elucidate the measurement of the basic cultural dimensions we distinguish and the data we use. Then we show that regions in Europe differ considerably on these basic dimensions and we use regression analysis in order to explain value differences across European regions. Finally, we present our conclusions.

MODERNISATION AND PATH DEPENDENCY

Modernisation theory

The crucial notion within modernisation theory is that the most important development in European history has been the transition from tradition to modernity, which has had far reaching consequences for the value patterns Europeans cherish today. In the boldest and most informative, but therefore also most vulnerable version of modernisation theory the crucial independent variable in the causal model is the industrialisation process (KERR *et al.*, 1960; KERR, 1983; MOORE, 1963). The argument goes as follows. Due to the industrialisation

process the division of labour has increased in all European countries in the last two centuries. The emergence and spread of national and international markets has continued and even accelerated. Further commercialisation of economic life has taken place. There has been a general enlargement of economic scale. Economic growth has seemed to drag on endlessly. The number of persons working in agriculture has continually decreased.

Intrinsic in the industrialisation process is, according to modernisation theory, an irreversible commitment to technical and economic rationality. The logic of industrial society imposes technical and economic rationality not only on the work place but also on all other spheres of society in a gradual but unremitting and persuasive way. Thus it enforces features that are functionally consistent with rationality and undermines those that are not. As a result all industrial societies will be brought on to convergent developmental paths. The place a particular society starts from, and the route it follows, is likely to affect its features for many years. However, all industrialising societies will respond to the inherent logic of industrialism itself. Consequently, any differences between industrial societies should eventually disappear as economic development continues.

Why should the modernisation process in general and industrialisation in particular lead to new 'rationalistic' value patterns? The answer is that it is the force of industrial circumstances, the inherent logic of industrialism that persuades people to adhere to 'rationalistic' opinions, ideas and values. Because this force is generally the same for everyone and similar in strength, consensus originates from it. The underlying theory is simple (INKELES, 1960). It is assumed that people have experiences, develop attitudes, and form values in response to the forces or pressures which their environment creates. The theory holds that, within broad limits, the same situational pressures, the same framework for living, will be experienced as similar and will generate the same or similar response by people from different countries. The core proposition

goes as follows: In so far as industrialisation, urbanisation and the development of large-scale bureaucratic structures and their usual accompaniments create a standard environment with standard, institutional pressures for particular groups, to that degree they should produce relatively standard patterns of experiences, attitudes, and values.

Culturalist theory

Although modernisation theory has provided some stimulating insights into the cultural similarities and differences observed across European countries, it was not capable to explain all or even a great part of the variation. Culturalist theory took over. It argued that cross-national differences and similarities in basic values are to a large extent the products of each country's unique trajectory of social development, its historical heritage, and cultural experiences and traditions (BAILEY, 1992). Today these cultural factors are often interpreted in terms of path dependence. Complex value patterns often display increasing returns to adoption in that the more they are adopted, the more experience is gained with them, and the more they are improved. Because the relative benefits of existing value patterns compared with 'new' patterns increases over time the probability of further steps along the same path increases with each move down that path (PIERSON, 2000). Therefore culturalists speak of path dependence. Path dependence means that the past has a grip on the present and the present has a grip on the future. In other words, history matters (NORTH, 1990). That does not mean that value patterns are preordained, but that today's and tomorrow's cultural options are constrained by earlier developments. And earlier events matter much more than later ones. These events have paved the path for today's cultures. The longer a particular cultural path has been followed that is characteristic of a certain region or nation-state, the more difficult it becomes to leave this path. Path dependent cultural processes

will often be most powerful not at the level of individuals, but at a more macro-level that involves complementary configurations of individuals and institutions, i.e., regions and nation-states. The length of the pedigree of a culture is of course not the only factor that determines the degree of path dependence. Some cultures are more effective and efficient than others in the formation of people's interests and identities necessary for their continuation. Variations in path dependence also reflect differences in the extent to which cultures have been subject to external pressures for change. Effectiveness and efficiency reinforce path dependence, external pressure for change weakens it.

Synthesis

Ronald Inglehart (1977, 1990, 1997) has suggested that several amendments are necessary if value researchers want to continue working with modernization theory. The first amendment is that humankind has entered a new historical stage, that of post-modernity or post-industrialism. This new stage is not only accompanied by new technological developments (information and communication technology) and economic changes (globalization of markets, flexibility of work), but it also brings new values, particularly post-materialistic rather than materialistic ones. The second one is that we must not focus all our attention on long-term developments, but that we also need to take into consideration short-term changes, such as the different phases of the business cycle, and short term events, such as wars and revolutions. A third amendment is that we must incorporate in modernization theory the theoretical notion of path dependency. This implies that although the direction of change may be common in various societies, each society develops according to its own speed and in distinctive way reflecting a society's social-cultural experiences and historical heritage. 'Economic development tends to push societies in a common

direction, but rather than converging, they seem to move on parallel trajectories shaped by their cultural heritage' (INGLEHART and BAKER, 2000: 49).

Although INGLEHART and BAKER (2000) join in with both modernisation and culturalist theory they also react against the deterministic character of these theories. Their central thesis is that economic development has systematic, and to some extent, predictable cultural and political consequences. These consequences are, however, not iron laws of history, but probabilistic trends. In other words, the probability is high that certain changes will occur as societies economically develop, but the question of whether they occur and if so, to what degree and in which form depends on the specific cultural and historical context of the society in question. Economic development brings cultural changes, but a history of Catholic, Protestant, Orthodox, Islamic or any other religious tradition gives rise to cultural zones that persist after controlling for the effects of economic development.

As far as economic development is concerned INGLEHART and BAKER (2000) argue, following BELL (1973), that three generic types of economies-cum-societies can be distinguished. In pre-industrial, agrarian societies life was a game against nature. In industrial societies dependence on nature became diminished due to technical progress and the systematic organization of work. In post-industrial societies services became dominant and life became a game between persons. These three 'ideal typical' societies went hand in hand with three 'ideal typical' value patterns. To tap these value patterns Inglehart and Baker distinguish two basic dimensions to measure cultural differences. They label these dimensions respectively the *Traditional/rational* and the *Survival/self-expression* dimension. The *Traditional/rational* dimension reflects a value system in which people at the pre-industrial, traditional pole of this dimension reject divorce, emphasize the importance of God, support deference to authority, seldom discuss politics and have high levels of national pride. At the industrial, rational pole of

this dimension opposite values are emphasized. The second dimension *Survival/self-expression* taps values that emerge in a post-industrial society with high levels of security. According to Inglehart, a central component of this dimension involves the difference between (pre)industrial, materialist and post-industrial, post-materialist values. This component measures the relative priority that is given to economic and physical security over self-expression and quality of life.

EXPLAINING VALUE DIFFERENCES ACROSS EUROPEAN REGIONS

If one wants to take modern European history and contemporary European social policy making seriously, then it is not a foregone conclusion that an empirical test of the convergence hypothesis should take nation states as the only aggregate level variable. Regions within the same nation state often differ in their stage and pace of economic development. Regions also differ sometimes in their cultural heritages. Although the most common sources of these heritages, religions and languages, often follow the boundaries of nation states, sometimes religious and language divisions became identified with regions within nation states (KEATING, 1998).

We measure culture along two basic dimensions developed by Inglehart as described earlier. Data are taken from the European Value Studies (EVS). This survey comprises three waves (1981/1990/1999), of which we use the second and third. We did not use the first wave that was carried out in 1981, because of data limitations. The dataset comprises 8 countries, i.e. France, Italy, Germany, Spain, Portugal, The Netherlands, Belgium, and Great-Britain. In order to compare the data on basic values with regional economic data we used the Eurostat definition of regions. The regional level in our analyses is the NUTS1 level. This implies that France consists of 8 regions, Italy 11 (including Sicily and Sardinia), Germany 11 (former eastern regions excluded), Spain 7, Portugal 1 (excluding Azores and Madeira), The Netherlands 4,

Belgium 3, and Great-Britain 10 (including Scotland, excluding Northern Ireland). The total number of regions equals 55. We have calculated the two dimensions for these 55 regions in 1990 and 1999.

In table 1 we summarise the items that are included in our two dimensions. INGLEHART and BAKER (2000) extensively discuss the correlation of other items that are included in the European Values Study but not included in the dimensions in table 1ⁱ. Their conclusion is that the dimensions as defined tap a broad dimension of cross-cultural variation involving dozens of additional variables. The two dimensions therefore reflect basic cultural characteristics of a society.

<Insert table 1 about here>

Based on the above items we calculated the two dimensions for each region in each year for which we have data, i.e. 1990 and 1999. Due to the inclusion of an additional item in the British survey it is not possible to measure the values for Great-Britain on the second dimension (survival/self expression) in 1999ⁱⁱ. A graphical representation of the scores of the European regions in 1990 is presented belowⁱⁱⁱ. This regional analysis of 8 countries can be interpreted as a magnification of part of the analysis of INGLEHART and BAKER (2000) of 65 societies in the world. The relative position of the countries in our figure 1 correspond with the relative positions of these same countries in the figures at world scale as presented and discussed by INGLEHART and BAKER (2000). Figure 1 reveals significant intra-country differences.

<Insert figure 1 about here>

Hence, in line with our theoretical arguments presented before, values differ not only considerably across nations, but also across regions. German and Dutch regions score relatively high on both dimensions, Germany scores higher on the *Traditional/rational* dimension, and the Netherlands score relatively high on the *Survival/self-expression* dimension. British, Belgian and French regions are in the middle. The southern European regions of Italy, Portugal and Spain score consistently lower on both dimensions. Large regional differences in values within a European country can be found in Italy. They follow roughly the North-South divide. Another example is the large difference between Hamburg and Saarland in Germany.

As described above, Inglehart's thesis is that value differences can be explained both by differences in welfare levels as well as cultural heritage. In order to test simultaneously for the influence of economic development and cultural heritage we perform a regression analysis. Table 2 summarises our regression results of cross-regional differences in *Traditional/rational* values and *Survival/self-expression* values as measured in 55 European regions. As we have calculated the dimensions in 1990 and 1999 the number of panel observations is 110. The level of economic development has been measured by Gross Regional Products (GRP) and is based on Eurostat information. We use data on economic development preceding the years for which we want to explain cultural differences. The years we use for the two time periods are 1977, respectively 1990. In order to test if these years are possible biases in terms of GRP, we also tested the correlation with the 5-year average in which the two chosen years fall in between. As the correlation was over .99 we feel safe to claim that a bias in measurement of level of economic development is not to be expected.

<Insert table 2 about here>

With respect to cultural heritage we follow INGLEHART and BAKER (2000) and measure cultural heritage by including a dummy for religious past. In the European case this choice is binomial, namely protestant or catholic^{iv}. We labelled Great-Britain and the northern German and Dutch regions as protestant. The dummy takes the value 1 if a region has a protestant heritage.

The panel allows us to test if there is perhaps a period-specific effect that has influenced the development of values. The period-specific dummy takes the value 1 in the second period (t=2). Hence, a negative coefficient of the period-specific effect would imply that a downward correction on the dependent variable is needed in the second period, which is the 1990s.

The basic model we estimate is presented in column 1 (traditional/rational) and column 2 (survival/self-expression) of table 2. In addition to these default models we have estimated several alternative regression models. We test for the inclusion of country specific effects (column 3-4), replacing GRP per capita by sectoral employment shares^v (column 5-6) and alternative measures for path dependency (column 7-8). But we first describe the results of the default model.

As expected the level of economic development is an important explanatory variable when explaining differences in value systems. Both on the *Traditional/rational* dimension and the *Survival/self-expression* dimension GRP per capita has a significant and positive effect. Our measure of cultural heritage, the religious past of a region, is significantly related to the differences in values across European regions. In line with the results of INGLEHART and BAKER (2000), a protestant heritage is positively related to both cultural dimensions. The period-specific effect taking the value 1 on t=2 is only significant when explaining cross-regional differences on the second dimension, i.e. *Survival/self-expression*. The positive significant result implies that an upward correction is needed in the 1990s compared to the period before when

explaining the variation in the *Survival/self-expression* dimension. This indicates that apparently Europeans have experienced some kind of a shock in the 1990s, which changed their value pattern in the direction of more post-modern values.

As mentioned before, we test for alternative regression models. We first test if the results with respect to economic development, cultural heritage and the period-specific effect are robust to the inclusion of country-specific characteristics. We have taken the most populous European country Germany as the country of reference. This means that a significant positive country-specific effect of for example Spain would imply that an upward correction is needed for Spain compared to Germany for the specific dependent variable^{vi}. The results are shown in table 2. Interestingly, the protestant dummy is not significant once we control for country-specific effects. This suggests that Inglehart and Baker are right when arguing that ‘given religious traditions have historically shaped the national culture of given societies, but that today their impact is transmitted through nationwide institutions, to the population of that society as a whole – even to those who have little or no contact with religious institutions’ (INGLEHART and BAKER, 2000, p. 36). Indeed, our results suggest that the regional differences within Germany and the Netherlands in terms of protestant or catholic tradition are not so strong to significantly differ from national characteristics once we control for the latter.

Next we include sectoral employment shares instead of GRP per capita, resulting in a significant relationship between size of the industry and the traditional/rational dimension, respectively, the service sector and the survival/self-expression dimension. As GRP per capita and sectoral structure are interrelated this result is not surprising. Nevertheless, the explained variance in the traditional/rational dimension decreases from .37 in the default model (column 1) to .11 in case the size of the industrial sector is included (column 5). The reason for the worse model fit may be caused by the fact that the relationship between size of the industrial sector in

terms of employment and the GRP per capita is not a linear one (CHENERY, 1960; FEINSTEIN, 1999).

Finally we test alternative measures for path dependency by including information on legal origin. As shown by LAPORTA *et al.* (1998) countries have different legal origins which leaves a permanent imprint on the legal environment today. Legal scholars have identified four major legal families: Scandinavian Civil Law, French Civil Law, English Common Law and German Civil Law (see KUNT and LEVINE, 2001). In the sample most countries have a French legal origin. The exceptions are Germany and Great-Britain. In our sample of regions, this implies we include dummies for the English and German legal origin versus regions with a French legal origin. The results in table 2 suggest that regions with English legal heritage are – *ceteris paribus* - relatively traditional compared with countries that have a French legal heritage. A German legal heritage results – *ceteris paribus* – in more rational values. It corresponds with the position of the regions as depicted in figure 1 and can be seen as an interpretation of the country specific effects as estimated in models 3 and 4. German regions score high on the first dimension which is reflected in a significant effect of our variable measuring a German legal origin (model 7) and negative and significant country-specific effects in model 3. A similar line of reasoning holds for the relatively low score on the first dimension of the British regions.

CONCLUSION AND DISCUSSION

The process of European integration has resulted in a considerable body of policymaking on the so-called ‘Europe of the regions’, meaning that much development will take place on the regional level. In this paper we have focused on the explanation of value patterns and differences in values between European regions. The explanation of value differences is particularly interesting against

the background of a unifying Europe and the idea of a 'Europe of the regions'. The question we tried to answer in this paper is whether we can speak of cultural unification in Europe. Theoretically, two extreme points of view exist. Modernization theorists predict cultural convergence, whereas culturalists on the other hand argue that cultural differences between European regions are path dependent. Inglehart has suggested a synthetic theory in which these two extremes are combined. According to Inglehart, modernization theorists are right when arguing that economic development tends to push societies in a common direction, but rather than converging they seem to move on parallel trajectories shaped by their cultural heritage.

Using a panel of 55 European regions and scores on two basic cultural dimensions (traditional/rational and survival/self expression) in 1990 and 1999 we have attempted to explain value differences between European regions. Though at a world scale the 8 countries in our sample may be culturally close, a regional breakdown of the cultural dimensions suggests considerable regional differences within these 8 countries. Our regression analysis and the robustness tests show that modernization, i.c. economic development, is an important driver of value change in these regions, but also that there are cultural processes of path dependency at work. In our analysis we proxied historical heritage by protestant or catholic historical tradition and legal origin. In addition, our results suggest that Europeans have experienced some shock in terms of the *Survival/self-expression* dimension in the 1990s. In sum, based on our sample of European regions we find empirical support for the theoretical synthesis of modernization and culturalist theory as proposed by Inglehart. With respect to our initial research question on cultural convergence in European regions our results suggest that (further) convergence is to be expected, but also that path dependence leaves a permanent imprint^{vii}. Our panel allowed us to recognize the importance of period-shocks and in addition we have used alternative measures for

path dependency. However, despite the novelty of our regional empirical analysis of cultural convergence in Europe a number of limitations remain.

One shortcoming of our analysis is the fact that we have measured culture along two basic dimensions as developed by Inglehart. Though thoroughly tested (see INGLEHART and BAKER, 2000) the question remains whether this instrument is a sufficient measure for such a complex concept as culture. It would be interesting to perform a similar analysis using alternative measures of culture, such as those developed by HOFSTEDE (2001) or SCHWARTZ (1992). Unfortunately, cross-national surveys that used these measures do not contain data at the level of regions within European countries.

Another limitation concerns the period-specific effect in the 1990s on one of our dimensions that describe basic values, the *Survival/self-expression* dimension. It remains to be seen whether this shock will have only temporary effects on this dimension or will have a permanent character. Using data of the next wave of EVS (planned for 2008) may shed new light on this. Our current results only allow us to make a crude guess what may have caused this shock effect. Broad societal developments like the New Economy hype at the end of the 1990s, the adoption of the single currency in Europe and – perhaps most important - the collapse of the Soviet Union and ‘the end of history’ (FUKUYAMA, 1992) may have resulted in an optimistic view on the future and may have subsequently resulted in this period-specific effect on basic value differences across European regions in the 1990s. Our data do not allow us to substantiate these conjectures at this moment.

Thirdly, the test of modernization theory was limited to only one indicator, i.c. the level of economic development as measured by GDP. Applying a multiple indicator approach will be a step forward. Although GDP has proven to be the best single indicator in previous research there is a problem in our case. Our sample of European regions is confined to the upper end of regional

GDPs at a world scale^{viii}. This implies that one should be careful in interpreting and generalizing our results as a ‘strong’ test of modernization theory.

Fourthly, we looked only at religion and legal origin as indicators of cultural path dependence. To gain a better insight into the historical borderlines on the map of European values we need a better understanding of the complex history of shifting fault lines. According to DAVIES (1996) the most obvious dividing lines are the ones that separate Western from Eastern Europe (Eastern vs. Western Roman Empire, Orthodox vs. Latin Christendom, Communism vs. Capitalism) and Northern and Southern Europe (the line of the Roman *limes*, Romance vs. Germanic languages). The extension of the European Union to the East in 2004 and the availability of both EVS and other regional data for a larger part of Europe will increase the feasibility of more encompassing and in-depth analyses.

Finally, our analysis has been performed at the aggregate level. To fully understand the changes in the regional scores on the two dimensions, it might be fruitful to perform an in-depth analysis of several regions. Multi-level analyses and case studies may help to unravel the region-specific idiosyncrasies.

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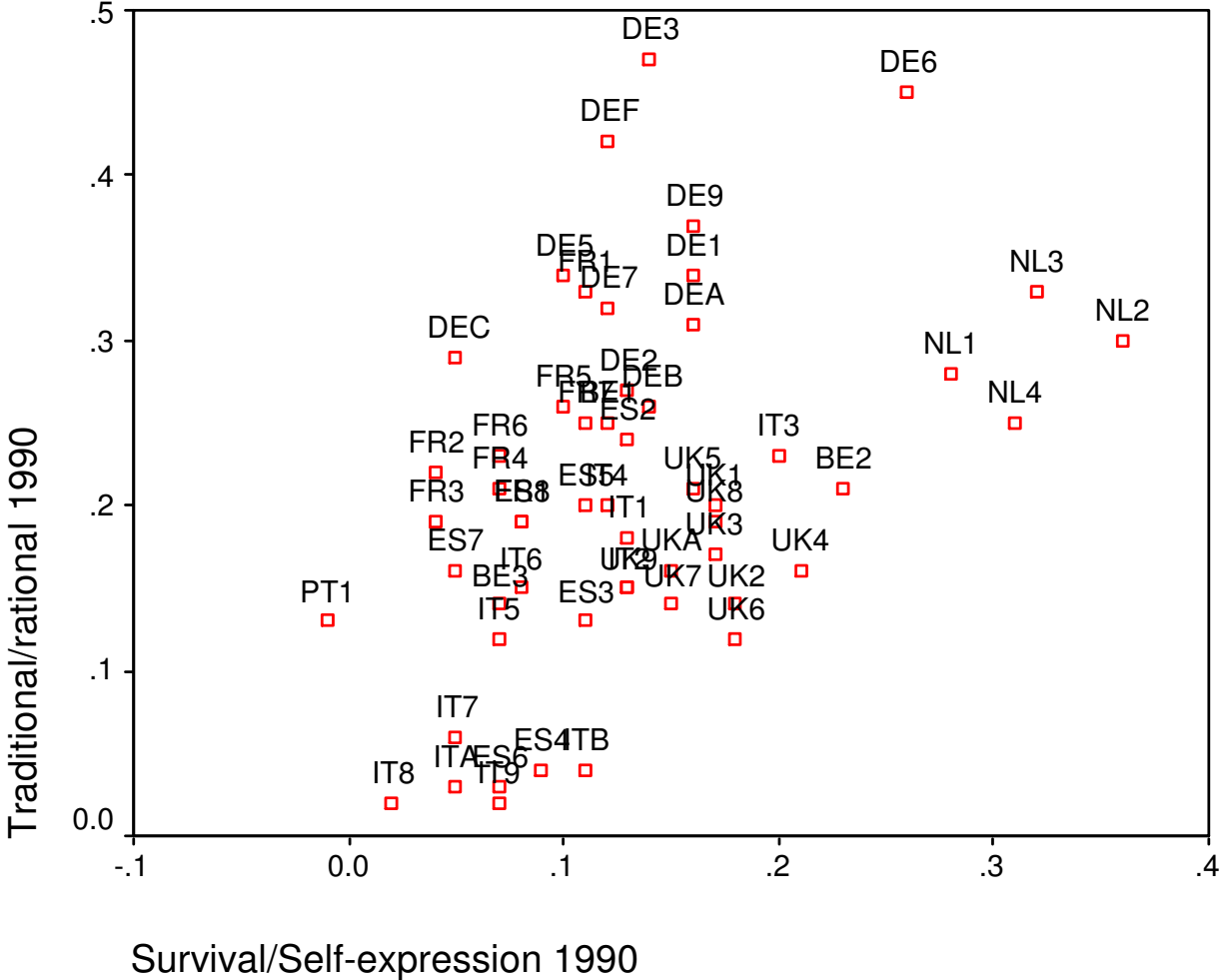
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Figure 1: scores of European regions on two cultural dimensions in 1990



Explanation of NUTS 1 codes in figure 1

	Region	NUTS1 code		Region	NUTS 1 code
1	Reg. Bruxelles-Cap.	BE1	29	Méditerranée	FR8
2	Vlaanderen	BE2	30	Nord Ovest	IT1
3	Wallonie	BE3	31	Lombardia	IT2
4	Baden-Württemberg	DE1	32	Nord Est	IT3
5	Bayern	DE2	33	Emilia-Romagna	IT4
6	Berlin	DE3	34	Centro	IT5
7	Bremen	DE5	35	Lazio	IT6
8	Hamburg	DE6	36	Ambruzzo-Molise	IT7
9	Hessen	DE7	37	Campania	IT8
10	Niedersachsen	DE9	38	Sud	IT9
11	Nordrhein-Westfalen	DEA	39	Sicilia	ITA
12	Rheinland-Pfalz	DEB	40	Sardegna	ITB
13	Saarland	DEC	41	Noord-Nederland	NL1
14	Schleswig-Holstein	DEF	42	Oost-Nederland	NL2
15	Noroeste	ES1	43	West-Nederland	NL3
16	Noreste	ES2	44	Zuid-Nederland	NL4
17	Madrid	ES3	45	Portugal Continente	PT1
18	Centro	ES4	46	North	UK1
19	Este	ES5	47	Yorkshire and Humberside	UK2
20	Sur	ES6	48	East Midlands	UK3
21	Canarias	ES7	49	East Anglia	UK4
22	Île de France	FR1	50	South East	UK5
23	Bassin Parisien	FR2	51	South West	UK6
24	Nord-Pas-de-Calais	FR3	52	West Midlands	UK7
25	Est	FR4	53	North West	UK8
26	Ouest	FR5	54	Wales	UK9
27	Sud-Ouest	FR6	55	Scotland	UKA
28	Centre-Est	FR7			

Table 1: Two dimensions of culture

Traditional/Rational dimension
<p>Traditional values emphasize the following:</p> <ul style="list-style-type: none"> • God is very important in respondent's life • Respondent has a strong sense of national pride • Respondent favours more respect for authority • Divorce is never justifiable • Respondent almost never discusses political matters <p>(Rational values emphasize the opposite)</p>
Survival/Self-expression dimension
<p>Survival values emphasize the following:</p> <ul style="list-style-type: none"> • Respondent gives priority to economic and physical security over self-expression and quality of life • Respondent describes him/her self as not very happy • Respondent describes him/her self as not very satisfied with life • Homosexuality is never justifiable • Respondent's feel one has to be very careful in trusting people <p>(Self-expression values emphasize the opposite)</p>

Source: Inglehart and Baker (2000).

Table 2: Regression results of two cultural dimensions on independent variables measuring economic development, cultural heritage, period-specific effects and country-specific effects.

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dimension 1:	Dimension 2:	Dimension 1:	Dimension 2:	Dimension 1:	Dimension 2:	Dimension 1:	Dimension 2:
	Traditional-secular/rational	Survival/-self-expression	Traditional-secular/rational	Survival/-self-expression	Traditional-secular/rational	Survival/-self-expression	Traditional-secular/rational	Survival/-self-expression
Explanatory variables:			Including country-specific effects	Including country-specific effects	Sectoral shares instead of GRP	Sectoral share instead of GRP	Legal origin	Legal origin
Gross Regional Product (/1000)	.015 (.0022)**	.003 (.001)*	.008 (.001)**	.0056 (.001)**	-	-	.009 (.001)**	.003 (.0015)*
Historically protestant (=1)	.035 (.017)*	.084 (.018)**	.018 (.033)	-.002 (.016)	.059 (.021)**	.079 (.017)**	.068 (.024)**	.106 (.027)**
Period-specific effect (2nd period (90s)= 1)	-.011 (-.015)	.032 (.014)*	0.002 (.011)	.024 (.009)**	.016 (.019)	.039 (.013)**	.000 (.013)	.028 (.015)*
Netherlands	-	-	-.03 (.025)	.18 (.015)**	-	-	-	-
Spain	-	-	-.13 (.031)**	.002 (.019)	-	-	-	-
Portugal	-	-	-.18 (.048)**	-.11 (.018)**	-	-	-	-
Great-Britain	-	-	-.15 (.030)**	.048 (.016)**	-	-	-	-
Belgium	-	-	-.12 (.027)**	-.0009 (.029)	-	-	-	-
France	-	-	-.08 (.027)**	-.053 (.015)**	-	-	-	-
Italy	-	-	-.19 (.027)**	-.03 (.016)	-	-	-	-
Employment in industry	-	-	-	-	.33 (.15)*	-	-	-
Employment in service	-	-	-	-	-	.17 (.07)*	-	-
Legal origin: G	-	-	-	-	-	-	.110 (.024)**	-.027 (.021)
Legal origin: E	-	-	-	-	-	-	-.067 (.025)**	-.046 (.030)
N	110	100	110	100	110	100	110	100
R-square	.37	.31	.72	.76	.11	.32	.58	.34

Note: White corrected standard errors between parentheses; * indicates 5% significance, ** indicates 1% significance. For explanation of variable legal origin: see main text.

ENDNOTES

ⁱ It is important to note that the WVS dataset used by Inglehart and the EVS used by us have much in common, but are also to some extent different. WVS comprises not only the European countries of EVS, but also a large number of other Western and non-Western countries. It should be mentioned however, that the majority of the survey questions in EVS and WVS are exactly the same.

ⁱⁱ This is the reason for the difference in number of observation in our regression analysis (100 for survival/self-expression versus 110 in the estimation of the traditional rational dimension).

ⁱⁱⁱ The figure with the 1999 scores shows a similar pattern.

^{iv} Though we acknowledge that for example the southern regions of Spain have been under Islamic influence before the 14th century. Nevertheless it is clear that Catholicism shaped Spain in the subsequent centuries.

^v We are grateful to one of the reviewers for pointing this out.

^{vi} It is important to stress that significant country dummies do not imply that these countries have some specific features. It only shows that they differ on a specific dimension *compared* to the country of reference (i.e Germany).

^{vii} Building on the estimated coefficients of our regression analysis we tried to shed some light on value convergence in European regions. Allowing for catching-up economic growth by assuming that poorer regions would grow faster and obtain similar levels of welfare as richer regions, we calculated the scores on the two cultural dimensions in 2020. As logically follows from our statistical model, the path dependencies limit the degree of convergence considerably. In other words, it would take a very long period (and perhaps even unrealistic assumptions) to allow for complete value convergence in Europe. The statistical results are available upon request.

^{viii} We are grateful to one of the reviewers for pointing this out.