# THE INFLUENCE OF CULTURAL VARIABLES ON SUSTAINABLE DEVELOPMENT. AN ANALYSIS IN THE EUROPEAN CONTEXT

# Mihai TALMACIU\*

**Abstract:** Economic and social cohesion policy is the most important of EU policies to mitigate inequalities in economic development between member states, which tend to increase in the context of globalization. For this reason it becomes increasingly important to identify the causes of underdevelopment of lagging countries or regions, by analyzing the influence of economic, socio demographic, cultural, institutional and political variables on growth and development. Economic development is an evolutionary process in which people / society is the purpose and means, causes and effects thereof. The sustainable development must be an anthropocentric one, because the human factor has the decisive role in ensuring its success. In nowadays the economic progress of lagging countries or regions dramatically depends on their ability to harness the potential of creativity, skills and abilities of the human factor, by promoting those cultural values that can contribute to the higher growth. The development can be boosted when the population is driven by a strong work ethic, fierce desire to learn from the experiences of other countries, the attachment to the principles of quality and professional excellence, etc., and all this are closely related to the cultural matrix of the country. This article aims to identify the cultural aspects with a major impact on national or regional economic development and to provide an analysis of the implications of cultural differences between EU countries on disparities in development. In order to achieve these objectives will be used data on the situation of development indices (HDI, Legatum Prosperity Index, etc.) and regarding the situation of some cultural variables in European countries, offered by the World Values Survey.

**Keywords:** culture; sustainable development; development indices; European context

# Introduction

The increase of inequalities in the world economy has led to the intensification of debates regarding the economic disparities between states, their

<sup>\*</sup> Associate professor, Faculty of Economics and Business Administration, "Alexandru Ioan Cuza" University of Iasi; e-mail mtalm@uaic.ro.





component regions and, social groups in order to identify the economic and social factors and phenomena leading to this state of things (Gustafson and Johanson, 1997). The surveys carried out on the dynamics of regional disparities have shown weak tendencies for convergence between the EU regions (Barro and Sala-i-Martin, 1991 and 1992; Armstrong, 1995), interregional inequalities are quite big even in the small counties (Felsenstein and Protnov, 2005), and the free market has led to the increase of inequalities between the developed regions and the poorly developed ones (Malul and Bar-El, 2009). In these conditions, more and more authors have tried to study the factors determining the increase of regional inequalities, and of all these the influence exerted by culture. The national/regional cultural aspects influence the economic environment (Freytag and Turik, 2007) and are, in their turn, influenced by the evolution thereof, and the cultural variables have a significant impact upon the increase of inequalities in the distribution of income (Malul *et al.*, 2010).

The interest for the study of the influence of some non-economic factors belonging to the socio-cultural system on the regional economic development and for the adoption of some economic policies that may take into account culture as a development factor has increased lately due to the recent evolutions in the world economy determined by the phenomena of economic integration and globalization (Ohmae, 1995). These phenomena have caused the approaches of economic growth and development based on the production factors to diminish their importance in favor of some approaches that take into consideration the role of entrepreneurial behavior and spirit and innovation when explaining the economic success, in other words the relationship between entrepreneurial culture and economic development (Martin and Sunley 1998; Borza, 2012).

The era of globalization and European economic integration has become more and more an era of renewal and revitalization of regional economies. The development of regional internal markets has encouraged regions to specialize more and more in those economic sectors that have comparative advantages. The European Committee has considered that the advantage of such a trend consists in the extension of subsidiarity principle to the concept known as "l'Europe des regions" (Beugelsdijk, 2010).

Economic development is an evolving process in which people/society represents the goal and means, the cause and effect of this process. The process of sustainable development must be an anthropocentric one since the human factor has the determining role in providing the success thereof. In the current international economic conjuncture, the economic progress of countries and regions lagging behind radically depends on their capacity to valorize the potential of creativity, skills and competences of the human factor, to promote those cultural values that may contribute to the acceleration of economic growth. The process of development may be stimulated when the population of the country or region is animated by strong labor ethics, the powerful desire to learn from the experiences of other people, the attachment to the principles of quality and professional excellence etc., and all these are tightly connected to the cultural matrix of a country.

This article aims at identifying the aspects of the national or regional cultural framework having a major incidence on the economic development and making an analysis of the implications of cultural differences between the EU countries on the development discrepancies. To attain such objectives we will use data related to the situation of development indices of the European Union countries (IDU, Legatum Prosperity Index, Global Competitiveness Index etc.) and the situation of some cultural variables in the European countries offered by World Values Survey.

#### 1. Literature review

The rapid economic growth of some developing countries in recent years may be considered as an effect of some cultural factors, but this is difficult to demonstrate in the conditions of reasoning of neoclassic economists. Some development economists have argued with facts that the economic development cannot be explained without paying tribute to the cultural factors. However, there are opinions according to which the effect of the "invisible hand" of culture on development has only been shown but not validated from the economic viewpoint.

In his research regarding the factors that contributed to the economic growth worldwide and the course of history, David Landes has reached the disarming conclusion according to which "if we can learn anything from the history of economic development this is the fact that culture makes the difference" (Landes 1999). In other words, some countries evolve more rapidly than others and consequently they are richer than others because their cultures, more precisely their cultural contexts are more favorable to growth.

The inequalities in the economic development of countries and regions may be justified by factors related to the cultural context and not only by the differentiated endowment with technical capital or progress, especially in the conditions of liberalization of markets and circulation of labour, capital and knowledge. Thus, aspects related to the social and cultural context such as the open attitude towards the ideas come from the exterior, the entrepreneurial culture and innovation, training, the qualities of the regional human capital, such as the capacity to identify and valorize the opportunities offered by the market, the entrepreneurial spirit, the open attitude towards risk-taking belonging to the economic behaviour, the attitude towards work, the ethical behaviour and trust, the propensity for saving money and investing it in economic activities, the open attitude towards the transfer of advanced technologies and new knowledge, the social behaviour and involvement into the life of community or development projects of common interest acquire a fundamental importance in the development process.

The idea that cultural aspects have a determining role for the progress and increase of a country's wealth is not a recent one. Thus, sociologist Max Webber (1864-1920) supported the idea of "protestant ethics" promoting the virtues of hard work and accumulation of wealth which made possible the spectacular economic growth registered by the countries of Western Europe as of the 16<sup>th</sup> century. The





possibility for cultural differences between countries or regions (and the system of values, convictions, the prevalent attitudes in a society) to be at least partially responsible for the differences of economic development has recently made researchers ask themselves whether the rapid economic development of some countries could be justified by cultural aspects. Thus, the fast economic progresses of some countries from the SE Asia such as Taiwan, South Korea, Singapore, China might be explained by the sharing the so-called "Asian values" (Weil, 2007).

Culture can be defined as a process of "mentality setting" or a mental framework resulting from the values, beliefs, symbols and social ideals shared by the members of a community or social group (Triandis, 1995). This process of "programming" mentalities starts early in life (Hofstede, 1980), it is influenced by the institutional framework and leads to the formation of some behavioral models that manifest a relative stability and continuity over time (Hofstede, 1980; Mueller and Thomas 2001). According to the researches carried out, culture influences a vast range of economic behaviors such as the decision to become an entrepreneur more than someone's employee, the acceptance of multinational firms, the manifestation and development of trust among employees, and the control methods (Audretsch *et al.*, 2007) etc.

Culture includes all aspects and activities carried out in a certain space: the values shared by the community members, beliefs, traditions, economic activities lying at the bottom of community welfare. In the conditions of a more increased globalization, it is regarded more as an active force in the economic and social reproduction and a distinctive factor that trigger the increase of competitiveness of a region in the world markets (Clifford and Marcus, 1996). Some authors have formulated opinions according to which socio-cultural and behavioral factors have a decisive importance in the processes of national/regional development more than the traditional attributes of economic geography: distance, concentration, resources, etc. (Putnam *et al.*, 1993; Tiganas *et al.*, 2014).

Culture may be regarded as a factor that generates economic development under two aspects: an instrument or a resource that may be used in the context of economic sectors (culture as a factor contributing directly to GDP increase) and a component of the environment where economic agents carry out their activity which exhibits aspects that stimulate and potentiate their efforts in the direction of development. In the first case, we refer to the material components of one country's or region's culture that may be valorized for commercial purposes, and in the second case we speak of a set of non-material characteristics (social, moral) that may favour or hinder economic operators' initiatives and the entire development process. As for the effects upon the economic development, we may affirm that not only does culture represent a determining factor by itself, but it has some characteristics of the cultural context.

Society's opening to the new ideas coming from the exterior is an aspect underlined by those who studied the historical evolution of the economic development process. Thus, some countries have registered rapid economic progresses by adopting some open attitudes towards ideas, technologies, forms of political, economic and military organization from the exterior: the European

countries after the protestant reform (the 16<sup>th</sup> century), Japan starting from the second half of the 19<sup>th</sup> century and the countries from South-East Asia starting from the second half of the 20<sup>th</sup> century (registering an unprecedented technological emulation in history). Other countries that registered a high level of development registered a decline due to the rejection of ideas come from other cultures or political systems: China in the period 1500-1900, the Arabic and Islam countries and the socialist countries (Weil, 2007).

The attitude towards hard/intense labour shows representative cultural differentiations. In many cultures, including European ones, there were hostile attitudes towards labour, and it was regarded rather like a "necessary evil" (in the Greek classical culture labour was considered as reserved to slaves). Sociologist Max Weber considers that this "dedication towards intense and hard work" and the positive attitude towards the accumulation of wealth explains, at least partially, the economic development of the regions having a population predominantly protestant in Europe.

The propensity to saving or spending money is regarded as an important factor for development in the context of many development theories and models. In the postwar period, the countries that had the highest rates of saving and implicitly high paces of development were the countries from the east and south-east of Asia (Japan, South Korea, Taiwan, Singapore, Hong-Kong), which have cultural customs strongly influenced by China. From here we get the idea that a common cultural element might be Confucianism that promoted the "virtues of diligence and parsimony". The studies carried out in the USA or Canada on the immigrant communities are not relevant for several reasons: those who emigrate do not reflect correctly the culture they abandon and do not represent the essential aspects of it (maybe they do not feel very attached to the cultural values of their country of origin). Moreover, the cultural values acquired by allegiance to the culture of origin may suffer cultural influences from the receiving country and those who emigrate have a different attitude towards risks and the sacrifices necessary to have access to a better life (Carol et al., 1999).

The importance of trust for the development of the business environment and economy as a whole was highlighted by prominent economists who said that the difficulty to find trustworthy persons you know you can rely on is a major obstacle in the way of development of the economic activity (John Stuart Mill) and that most of the economic lagging existing in the world may be justified by the lack of trust (Arrow, 1974). To study the economic importance of differences in terms of the level of trust, we analyzed the way in which this correlates to the level of investments. The data showed a positive and strong relationship between the level of trust registered and the invested output.

Social capital, defined by the system of relationships that the individuals belonging to a society establish between them and the tendency manifesting within this network to support each other for the attaining of objectives and tasks, is a factor identified by sociologists and economists as determining for the level of trust of a society. One of the important effects of social capital is that of improving the functioning of authorities and institutions, especially of those elected by voting.





Based on a studies carried out, Robert Putnam affirmed that in the last 40 years the level of social capital in the USA has reduced continuously as a result of several factors such as the physical extension of urban centres or the free access of population to the audio-visual means (Putnam, 2000).

Social capacity highlights social and cultural characteristics allowing a community to valorize the economic opportunities as much as possible (Abramovitz, 1986). In Abramovitz's vision, in the process of economic growth the poorly developed countries which have sufficient social capacity are capable to valorize better the opportunities offered in the interactions with the developed economies by transfers of technology, know-how, trade and capital flows.

The social capacity of a country or region may be appreciated based on several elements: the experience of population in the organization and management of enterprises, the capacity to valorize the advantages of market economy by specialization and trade, the mentality of population compatible to the empirical science (studying the absolute relevance of cause-effect relations as compared to those based on superstition and magic), and a special perspective that concentrates on the importance of terrestrial life.

Author David N. Weil (2007) analysed the connection between Adelman-Morris index (1961) and the level of revenue per capita in the period 1960-2000 for several countries and he showed a strong correlation between them. His conclusion showed that the countries characterized by higher residual values of social capacity registered higher paces of economic development (South Korea, Japan, Thailand), and the countries having small or negative residual values of social capacity increased much less from the economic viewpoint (Cameroon, Madagascar, Venezuela). From here we have the positive and strong correlation between the residual component of social capacity and the successive economic development.

An important component of culture is *learning/training*. Thus, more the members of a community having a specific culture are ready and capable to learn from the experiences and opportunities offered by environment and the surrounding world, more the respective society registers a stronger development. Society's capacity to learn, innovate and act differently is a process with a long evolution over time and depends on the system of shared values, consecrated practices (traditions, customs), and the institutional influences for the adoption of new practices.

Some authors have not managed to find a statistic correlation between the level of schooling and economic growth (Easterly, 2001, pp73-84; Bosworth and Collins, 2003). Others followed a different path by taking into account the level of qualification appreciated by a series of variables that approximate the quality of training as scores obtained by test (Barro and Sala–i-Martin, 2004, p.537; Mankiw 1995). Statistic studies attempting to show the connection between training and growth registered quite heterogeneous results (Baumol, 2007, p 163).

The absence of traditions, trust (in one's own forces and in community's members), entrepreneurial initiative and the propensity to learning may represent obstacles in the way of stimulation of endogenous development and may be regarded as attributes of some communities dominated by foreign corporations (Sweeney, 1990).

A component of the cultural context lying at the bottom of economic growth, especially in the advanced countries, is "Entrepreneurial cultural" whose main characteristic is the taking of risks (Phelps, 2006). One of the explanations for the poor economic performances identified by the author mentioned above is population's insufficient propensity to taking risks.

A study carried out in the interval 2003-2004 on a sample of Russian entrepreneurs showed that the entrepreneurial spirit propagated in the Russian economy via the family context as it happens in the societies having a strong entrepreneurial character (the USA). Thus, it has been noticed that the probability to become entrepreneurs is two times bigger for the people coming from families with previous experiences in enterprise management (they show the importance of education for entrepreneurial virtues ever since the family environment and hence the importance of some aspects of the cultural context, namely the capital and social capacity).

# 2. Data and methodology

The study of effects of the national or regional cultural context on economic development supposes first of all the verification of the extent to which culture presents important aspects varying from one country to another, or from region to another, that may influence in a significant manner the economic results obtained, and second the identification of those cultural variables having a more important impact on development. In some situations, it is possible to highlight in a direct way the economic effects of culture whereas in other cases it is possible to highlight the influence in an indirect manner. Moreover, information and data available for the cultural variables are so subjective so that the researcher may be influenced in the process of analysis by what they know about the economic results of such country or region.

The influence exerted by a series of variables having a strict economic character (physical and human capital, technical and technological progress) is easier to demonstrate due to the existence of statistic data supplied by the national accountancy, whereas for the cultural aspects there is no unique data source that may synthesize the cultural differences existing between countries. Moreover, formal data are completely lacking for some cultural aspects. Taking into account culture as a determining factor for economic development implies the resort to value judgments regarding the reliability of cultural systems.

Analysis must start from the study of economic implications of different national and/or regional cultural aspects forming the cultural context by finally evaluating the impact of non-economic factors on the economic growth on one hand, and on the other hand the way in which they are influenced by development. The problem must be approached in the light of mutual interrelation so as to establish the extent to which certain cultural characteristics may favor economic growth in certain circumstances by preventing it, in exchange, in others.

To analyze the link between economic growth of some countries included in the survey and the different variables of the cultural context we used the data of World Values Survey databank based on which we calculated the national scores in





terms of the following variables: social capital (score calculated based on the population's allegiance to different organizations with social character); trust – analyzed from the perspective of several dimensions thereof (trust in public and political institutions, great companies, mass media, organizations and movements and the trust manifested between the community members), the attitude towards work, aspects of entrepreneurial culture (creativity, innovation, risk taking). National scores for each variable were calculated as weighted arithmetic averages depending on the type of scales used and the number of their steps.

# 3. Relationship between cultural variables and development in the European countries

The study of implications of variables of the cultural context on development remains a domain difficult to approach in quantitative terms, the issue must be approached in the light of mutual interrelation between the different aspects of the national and/or regional cultural context and the development process by evaluating on one hand the implications of some non-economic factors on development and, on the other hand, the way in which the latter exerts influence upon the cultural factors.

**Table 1.** Development indices for several European countries

	Country/ development					GNI /per			
	indice	LPI	Rank	HDI	Rank	capita	Rank	GCI	Rank
1	Norway	3,52	1	0,94	1	63909,45	1	5,35	7
2	Switzerland	3,32	2	0,92	2	53761,92	2	5,70	1
3	Sweden	3,19	3	0,90	5	43201,35	3	5,41	5
4	Finland	3,02	4	0,88	8	37366,07	6	5,50	2
5	Netherlands	2,99	5	0,92	3	42397,20	5	5,45	4
6	Great Britain	2,69	6	0,89	6	35001,63	8	5,41	6
7	Germany	2,66	7	0,91	4	43048,68	4	5,49	3
8	France	2,07	8	0,88	7	36628,78	7	5,08	8
9	Slovenia	1,72	9	0,87	9	26808,60	11	4,22	18
10	Spain	1,67	10	0,87	11	30561,47	10	4,55	9
11	Poland	1,17	11	0,83	13	21487,18	14	4,48	10
12	Italy	1,07	12	0,87	10	32668,99	9	4,42	12
13	Hungary	0,92	13	0,82	14	21239,13	15	4,28	17
14	Cyprus	0,86	14	0,85	12	26770,73	12	4,31	15
15	Bulgaria	0,37	15	0,78	17	15401,58	18	4,37	13
16	Romania	0,07	16	0,79	15	17432,66	17	4,30	16
17	Ukraine	0,01	17	0,73	20	8214,53	20	4,14	19
18	Russia	-0,13	18	0,78	16	22616,58	13	4,37	14
19	Serbia and Montenegro	-0,39	19	0,75	19	11300,90	19	3,90	21
20	Turkey	-0,60	20	0,76	18	18391,40	16	4,46	11
21	Moldova	-0,68	21	0,66	21	5041,20	21	4,03	20

Source: Own processing by: Legatum Prosperity Report 2014, Human Development Report 2014, Global Competitiveness Report 2014/2015

As one may see from the data in table 1, the hierarchy in terms of the first ranked 10 countries and the last 10 is maintained, regardless of the way in which the development level of the countries under study is expressed. Thus, we may notice that the countries from Western Europe are among the most developed ones, the central European countries occupy the middle of the classification and the countries from eastern Europe and south east Europe are among the most poorly developed one, many of them belonging to the former communist bloc.

The data regarding the values of cultural variables included in the analysis highlight a series of similarities between some states, allowing the identification of the following groups: more developed western European countries (Great Britain, France, Norway, Finland, the Netherlands, Germany, Italy, Switzerland, Spain, Sweden), central European countries (Slovenia, Poland, Hungary) characterized by an intermediate development level and the eastern countries, more poorly developed, most of them belonging to the former communist bloc (Bulgaria, Cyprus, Romania, Russia, Serbia, Turkey, Moldova, Ukraine). There are several dissimilarities in terms of cultural values between these groups of states that might exert an influence on human capital and implicitly on the development process (table 2):

**Table 2.** Dissimilarities of cultural values between eastern and western European countries

	Eastern European countries /	Western European countries /			
	less developed	developed			
Religion	- High levels of importance	- lower values of importance of			
	of religion index;	religion Index;			
	- High concentration of	- Low percentage of people who			
	people who indicated the	indicated the religion among the most			
	religion among the most	important values in educating children;			
	important values in educating	- Religion consists of a mix of			
	children;	religions: large shares (over 20%) of:			
	- Predominantly Orthodox	protestant, evangelical religions, and			
	population and reduced	of people declared themselves as not			
	weights of people who	belonging to any religion			
	declared themselves as not				
	belonging to any religion				
	(except Russia)				
Traditions	- High levels of the	- Low levels the importance of			
	importance of traditions	traditions index reflecting the opening			
	index, which may reflect a	of new ideas, the methods, techniques,			
	reluctance to adopt the	modern management practices.			
	valuable ideas from other				
	cultures / countries.				
Hard work and	- more than 50% indicated	- below 50% indicated hard work			
innovation	hard work between values to	between values to be cultivated among			
	be cultivated among children	children (except France and Spain)			
	- lower weights indicated	- higher rates indicated imagination,			
	imagination, creativity and	creativity and innovation between			



	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	innovation between values	values that should be cultivated among
	that should be cultivated	children (25%)
	among children (under 25%)	
Independence /	- below 50% indicated	- more than 50% indicated
entrepreneurship	independence among the	independence among the values to be
	values to be cultivated in	cultivated in children
	children (except Cyprus)	- pronounced tendency towards
	- pronounced tendency	independence (except Spain)
	towards obedience (except	- stronger tendency towards asserting
	Russia and Bulgaria)	ego (except England)
	- reduced tendency towards	ego (eneept England)
	asserting ego (except Cyprus)	
Be rich/	- high levels of the indices	- power values of the indices that
materialism	that reflects the desire to be	reflects the desire to be rich and to
materiansin	rich and to accumulate	accumulate richness
	richness	- predominant inclination towards
	- predominant inclination	postmaterialism
	towards materialism	
Trust	- Very low values of	- Higher values of confidence indices -
	confidence indices	the highest level of confidence is
		manifested in northern Europe
		countries (developed)
Social Capital	- low level reflected by the	- high level reflectyed by higher
	very low weights of persons	weights of people who are members of
	who are members of	humanitarian and sports organizations
	humanitarian and sports	- Weights over 80% indicated
	organizations	tolerance, respect and responsibility as
	- lower weights indicated	values to be cultivated among children
	tolerance, respect and	
	responsibility as values to be	
	cultivated among children	

To identify the existence of some links between the values of cultural variables characteristic to the European countries under study and the indicators for development and economic growth, the intensity of these links and direction, we used Pearson's correlation coefficient. Thus, we may come to the following conclusions from table 3 which presents the matrix of correlation coefficients between the variables under study:

- direct connections of high intensity may be noticed between the indicators for development and cultural variables such as imagination and creativity, materialist/post-materialist index, trust and a series of variables that may be assimilated to social capital such as tolerance and respect and the allegiance to humanitarian and sports organizations;
- direct connections of medium intensity may be noticed in terms of the allegiance to protestant religion and the non-allegiance to a religion, the generation of new ideas, variables reflecting independence (affirmation of one's personality, obedience and independence), and responsibility from the variables associated to social capital);

**Table 3.** Peason correlation coefficients between values of development indices and cultural variable for several European countries

	Development indices						
	Cultural variable	LPI	HDI	GCI	GNI*		
	Importance/ religion	-0,68	-0,57	-0,57	0,39		
	Religion/none	0,60	0,60	0,59	0,56		
Religion	Religion/orthodox	-0,70	-0,76	-0,63	-0,66		
	Religion/protestant	0,63	0,48	0,66	0,61		
	Religion/catholic.	0,11	0,27	-0,13	0,04		
	Child values/Religion faith	-0,61	-0,51	-0,16	-0,54		
Tradition	Importance tradition	-0,68	-0,63	-0,69	-0,62		
Hard work/	Child values/Hard work	-0,85	-0,80	-0,76	-0,69		
Creativity	Importance/New ideas	0,44	0,46	0,48	0,42		
	Child values/Imagination	0,76	0,76	0,80	0,74		
Independance	Child values/Independence	0,64	0,64	0,49	0,63		
Entrepreneurship	I seek to be myself	0,55	0,55	0,59	0,73		
	Obedience/independence	0,65	0,55	0,56	0,62		
	Importance/be rich.	-0,80	-0,74	-0,70	-0,74		
Wealth	Wealth accumulation	0,38	0,27	-0,12	0,41		
Materialist	Taking risks	0,11	0,18	-0,03	0,14		
	Materialist/postmat Index	0,83	0,79	0,80	0,84		
Trust	Trust	0,81	0,66	0,77	0,81		
	Membership hummanitarian						
	organizations	0,84	0,84	0,76	0,80		
Social	Membership sport organizations	0,89	0,81	0,85	0,85		
Capital	Help people	0,26	0,30	0,20	0,33		
	Child values/Tolerance/respect	0,84	0,78	0,81	0,79		
	Child values/Responsibility	0,61	0,61	0,59	0,69		
	Child values/Perseverance	0,38	0,36	0,37	0,36		

Source: Own calculations based on values of development indices and cultural variables for the European countries included in the study, \*GNI/per capita

- direct connections of low intensity may be noticed for the importance of risk taking, the propensity to helping people, perseverance and allegiance to the Catholic religion;
- reverse connections of high intensity may be noticed in case of the following variables: hard/back-breaking work, the desire to be rich, the allegiance to the Orthodox religion and the anchoring into traditionalism;
- as for the importance of religion, we may notice a reverse connection of medium intensity.

The data presented highlight notable interstate differences in terms of some variables of the cultural matrix between the developed western European countries and the eastern European countries lagging behind. Thus, we may affirm that the countries from Western and Eastern Europe have attributes of cultural matrix more favorable to the development processes. In these regions different social (ethnical, religious) groups had to learn to collaborate, respect each other and to manifest a





higher level of trust to obtain mutual welfare. Thus, cultural values indispensable to development sustainability, such as trust and social capital, have built up over time.

### **Conclusions**

Economic development is an evolutionary process that involves quantitative and qualitative changes in the economy, people / society is the purpose and means, the cause and effect of this process. The human factor becomes the cause of the development process, through the ability to identify sources and opportunities for economic progress, to combine and use the resources at its disposal. At the same time, economic development increase the quality of human capital through acquisition of new competences, skills and abilities as result of raising the level of education of the population.

The analysis of economic development process and inter-state or interregional inequalities should be an anthropocentric one, because the human factor it has a decisive role in ensuring the success of economic growth, not resource abundance. In these circumstances, the importance of the cultural components for the development process is amplified. Some economists have argued that the economic development can't be explained without paying tribute to cultural factors. However, there are opinions that the effect of "invisible hand" of culture on development was only revealed, but not economically validated.

In the present economic international conjecture, the economic progress of lagging countries or regions depends radically on their ability to harness the potential of creativity, skills and abilities of the human factor, to promote those cultural values that can contribute to the higher growth. Thus, the human being/society is the central and stimulating element of the development process, the "black box" able to identify and capitalize the distinctive aspects and advantages of the national/regional economic environment. In those circumstances, the attitudes, skills, abilities and moral precepts of the people are particularly important. The development process can be boosted when the population is driven by a strong work ethic, fierce desire to learn from the experiences of other economies, the attachment to the principles of quality and professional excellence, etc., all of which are closely related issues of the cultural matrix of a country.

From the study may be highlighted significant differences between prevailing cultural values in the two categories of European states: the more advanced Western European countries and lagging Eastern European countries. Also, can be observed direct connections of high and medium intensity between the development indices for the 21 European countries included in the study and those of some cultural variables: trust, social capital, materialist/post-materialist index and some values that can be related to entrepreneurial culture (importance of new ideas, imagination and creativity, the independence). Reverse connections of high intensity may be noticed in case of the following variables: hard/back-breaking work, the desire to be rich, the importance of religion and the anchoring into traditionalism.

Although the research has shown a direct of medium intensity link between development indicators and the share of the population affiliated to a religion (Protestant, neo-Protestant) or without religious affiliation, and a reverse connection of high intensity with the share of Orthodox religion, the data should be interpreted with caution. This could be subject to a more in-depth research to examine the extent to which religion or religious context (dominant religion with share of over 85-90%, or a mix of religions with lower percentages) could explain, at least partially, the development disparities between countries and regions. One of the limitations of the research was the unavailability of data on cultural values for all European countries on World Values Survey website.

**Acknowledgements:** This study was was realized using the research infrastructure of the Integrated Centre for Studies in Environmental Science for Northeast Region, CERNESIM, a project financed through the POS-CCE programme number 257/28.09.2010.

## References

- Abramovitz, M. (1986), Catching Up, Forgoing Ahead, and Falling Behind, *The Journal of Economic History*, Vol. 46, Issue 2, pp. 385-406.
- Adelman, I. (1999), Fallacies in development theory and their implications for policy, *Working Paper No. 887*, California Agricultural Experiment Station Giannini Foundation of Agricultural Economics.
- Armstrong, H. (1995), Convergence amongst regions of the European Union, *Papers in Regional Science*, Vol. 74 No. 2, pp. 143-52.
- Arrow, K. J. (1962), The economic implications of Learning by doing, *Review of Economic Studies*, Vol. 29, Issue 3, pp. 155-73.
- Arrow, K. J. (1974), The limits of organization, Norton, New York.
- Audretsch, D.B., Grilo, I. and Thurik, A.R. (2007), Explaining entrepreneurship and the role of policy: a framework, in Audretsch, D.B., Grilo, I. and Thurik, A.R. (eds.) *Handbook of Research in Entrepreneurship Policy*, pp. 1-17, Edward Elgar, Cheltenham.
- Barro, R.J. and Sala i Martin (1991), *Convergence across states and regions*, Brookings Papers in Economic Activity, Vol. 1, available at: http://www.brookings.edu/~/media/Projects/BPEA/1991%201/1991a bpea barro salaimartin blanchard hall.PDF.
- Barro, Robert J. and Sala-I-Martin, Xavier (2004), Economic growth, Cambridge, MIT Press.
- Baumol, W., Litan, R. and Schramm, C. (2009), *Capitalismo buono capitalismo cattivo: l'imprenditorialità e i suoi nemici*, Università Bocconi, Milano.
- Beugelsdijk, S. (2010), Entrepreneurial Culture, Regional Innovativeness and Economic Growth, www-sre.wu-wien.ac.at/ersa/ersaconfs/ersa04/PDF/2010.pdf.
- Borza, M. (2012), The efficient administration analysis of environmental factors in the context of a sustainable economy, 12th International Multidisciplinary Scientific GeoConference, www.sgem.org, SGEM2012 Conference Proceedings/ ISSN 1314-2704, June 17-23, 2012, Vol. 4, pp. 1121 1128.
- Bosworth, B. P. and Collins, S. M. (2003), *The Empirics of growth: An Update*, Brookings Papers on Economic Activity.





- Carroll, C. D., Byung-Kun, R. and Changyong, R. (1999), Does Cultural Origin Affect Saving Behavior? Evidence From Immigrants, *Economic Development and Cultural Change*, Vol. 48, Issue 1, pp. 33-50.
- Clifford, J., Marcus, G. (1996) (eds.) *Writing Culture*. Berkeley, Ca: University of California Press. Easterly, W. and Levine, R. (2001), It's not factor accumulation: stylized facts and Growth models, *World bank economic review*, Vol. 15, Issue 2, pp. 177-219.
- Felsenstein, D. and Protnov, B.A. (2005), *Understanding regional inequality in small countries*, Regional Studies, Vol. 39, No. 5, pp. 647-658.
- Frankel, J. (2003), Comments on Bosworth and Collins, Brookings Papers on Economic Activity.
- Freytag, A. and Thurik, R. (2007), Entrepreneurship and its determinants in a cross-country setting, *Journal of Evolutionary Economics*, Vol. 17, Issue 2, pp 117-131.
- Gustafsson, B. and Johansson, M. (1997), In search for a smoking gun: what makes income inequality vary over time in different countries?, *Working Paper No. 172*, Syracuse University, Syracuse, NY.
- Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-related Values*, Sage, Newbury Park, CA.
- Isan, V., Chiper, S. (2007), *Reforms and reformers: Michael Cernea at the World Bank*, Analele Stiintifice ale Universitatii "Al. I. Cuza" Isai, Tomul LIV Stiinte Economic.
- Landes, David (1999), *The wealth and the poverty of nations: Why some are so rich and some so poor*, W.W. Norton, New York.
- Malul, M. and Bar-El, R. (2009), The gap between free market and social optimum in the location decision of economic activity, *Urban Studies*, Vol. 46, No. 10, pp. 2045–2059.
- Mankiw, N.G., Phelps, E.; Romer, P. (1995) The Growth of Nations, *Brookings Papers on Economic Activity*, Vol. 1995, No. 1, 25th Anniversary Issue.
- Martin, R. and Sunley, P. (1998), Slow convergence? The new endogenous growth theory and regional development, *Economic Geography*, Vol. 74, pp. 201-227.
- Mueller, S.L., Thomas, A.S. (2001), Culture and entrepreneurial potential: a nine country study of locus of control and innovativeness, *Journal of Business Venturing*, Vol. 16, pp. pp. 51-75.
- North, D. (1990), *Institutions, Institutional Change and Economic Performance* (Political Economy of Institutions and Decisions), Cambridge University Press
- Ohmae, K. (1995), *The end of the nation state: the rise of regional economies*, The Free Press, New York.
- Phelps, E.S. (2006), *The economic performance of nations: prosperity depends on dynamism, dynamism on institutions*, in Entrepreneurship, innovation and the growth mechanism of free-eterprise economies, Princeton, Princeton University Press.
- Putnam, R.D. (2000), *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster, New York.
- Sweeney, G. P. (1990), *Indigenous Development Strategies in Peripheral Regions: The Example of Ireland*, vol. Innovation and Regional Development: Strategies, Instruments, and Policy Co-ordination, Berlin: Walter de Gruyter.
- Talmaciu M. (2013), *Modele ale dezvoltarii economice sustenabile*, Studii Post-Doctorale in Economie: Disertatii Postdoctorale, Vol 3, Studii si cercetari fiscal bugetare, Editura Academiei Romane, ISBN 978-973-27-2290-9, 978-973-27-2293-0, pp 1146-1207.
- Tiganas, C., Mihai., C., Voda, I. and Lutac, G. (2014), *The Impact of Cultural Values on Human Development Index: A Comparative Analysis of Eastern-Western European Countries*, revista Transformations in Business and Economics, Lituania.
- Weil, D. (2007), Economic Growth, Pearson International Edition.
- Triandis, H. C. (1995), Individualism and Collectivism, Westview Press, Boulder CO.

