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Cultural Differences in Europe: The Clash of Civilizations or of Development?

Master Thesis

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Abstract: Understanding why cultures are different is important for the analysis of the drivers of integrational processes in Europe and Eurasia. Two prominent opposing theories are employed in explaining cultural (dis)similarities in the continent – the modernization theory and the Clash of civilizations. Data on 31 European countries from European Social Survey 2002 to 2012 were utilized in the empirical analysis using Schwartz' (2006) framework for analysing societal culture. A multidimensional scaling analysis identifies distinguishable Western, Orthodox and Muslim cultural clusters. Regression analysis demonstrates a strong effect of cultural heritage factors such as religion, language and communism on cultural values. Economic development is also found to be linked to systematic cultural differences but the analysis suggests that this relationship is of a spurious nature because cultural heritage factors are predictors of both cultural values and economic wealth. A more advanced fixed-effects method for analysing longitudinal data which controls for all time-constant characteristics of the countries also confirms that the results from cross-sectional analyses are biased. It finds statistically significant effect of economic growth only with regard to Mastery/Harmony cultural dimension but in opposite to the predicted direction and not to Autonomy/Embeddedness or Egalitarianism/Hierarchy where modernization theory proposes. Based on the empirical evidence this Master thesis concludes in favour of the Huntington's Clash of civilizations thesis and rejects the relevance of economic modernization as a source of cultural differences. Therefore, convergence of cultural values in the future is not expected.

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Introduction

Topic and Research question

This Master thesis aims at contributing to the theoretical and empirical understanding of the reasons of cultural diversity in Europe. It focuses on two fundamentally opposing theories which explain why cultures are different, namely modernization and culturalist theories. The overall research question is to find out which of the two theories is better able to explain current cultural differences and similarities in Europe. More specifically: can we attribute the cultural (dis)similarities in the continent to the different level of economic development or to country's cultural heritage? Huntington's Clash of civilizations thesis receives a considerable attention and it is tested whether it offers meaningful interpretation of the cultural differences in Europe. The validity of modernization theory is critically examined through rigorous statistical analysis and the possibility of a spurious relationship between economic wealth and cultural values is tested.

Relevance of the research question

Geopolitical relevance

A thorough analysis on the cultural heterogeneity in Europe may have important implications on how we understand the current processes of integration in the continent. As outlined by Gerhards and Hoelscher (2003), cultural differences between the old member states of the European Union and the countries candidates at that time may be an obstacle for their successful integration. This argument can be derived from the famous theory of Parsons according to which value consent is a prerequisite of social integration (1952; as ctited in Roose, 2012). More recently, the Huntington's Clash of civilizations theory predicts a rise of economic regionalization based on shared culture which goes simultaneously with a civilizational differentiation (Huntington, 1993). In the opinion of the author, the European Union is a political and economic organization of the European part of the Western civilization (1993, p. 27). His interpretation has often served as a basis for setting the cultural boundaries of the European Union and as an argument for opposing the inclusion of supposedly culturally more distinct countries such as Turkey (Hehler, 2002).

The direction of development in Eastern Europe seems ambiguous in the early 1990s when Huntington develops his theory. In his initial journal article (1993, p. 43) he depicts that *"the*

question whether Russia is part of the West or the leader of a distinct Slavic-Orthodox civilization has been a recurring one in Russian history". Twenty years later and especially amid the Ukrainian crisis from the beginning of 2014 it is increasingly clear which road has Russia taken. With the process of formation of the so called Eurasian Union the economic regionalization in the European continent based on the civilizations proposed by Huntington moves closer to reality. The Russia's ambition to build a political and economic supranational organization, resembling the EU, has a territorial coverage nearly overlapping with the Huntington's Slavic-Orthodox civilization. It currently encompasses Russia, Kazakhstan and Belorussia and there has been interest from or efforts to attract other countries in the region such as Armenia, Georgia, Ukraine and Kirgizstan. According to the ex-president and current Prime Minister Dmitriy Medvedev this organization must carry a character of a civilization (Sidibe, 2012). Therefore it is a form of an alternative to the EU, a formation which is in compliance with the idea of Vladimir Putin for a multi-polar world (2007). In his comprehensive article in newspaper "Izvestia" the Russian President suggests creating *"a powerful supranational union, which is able to become one of the poles in the modern world"*(Putin, 2011). The integrational process has been formalized with the formation of the Eurasian Customs Union in 2010 (Henley, 2014) and it is deepening with the creation of a Eurasian Economic Union from 2015 (Kimball, 2014). The success of this regional organization is also supposedly dependent on the cultural homogeneity of the participating countries. The question of the cultural diversity, its causes and future developments in Europe is particularly important in the formation of these two competing regional blocks and for their potential for enlargement with countries which have not yet clearly declared their foreign-political orientation such as Ukraine and Georgia (see Figure 1). There have been speculations that the Kremlin would attempt to attract even countries which are current members of the European Union but have historical and cultural connections to Russia and are *"loyal to the Russian economic interests"* such as Finland, Hungary, Czech Republic and Bulgaria (Lake, 2011).

Figure 1. European and Eurasian Union members and potential members

Source: The Guardian (2014)

Cultural similarity is not an official prerequisite of joining either regional organization, however, its relevance has been implied by politicians and some analysts consider it as a *"fundamentally important"* in the European integration (Obuljen, 2004). Therefore, answering the question how different culturally the countries in Europe are, whether we can reveal distinguishable cultural clusters as defined by Huntington and whether the differences can be overcome if the level of economic development levels off in the future, can have a huge impact on our understanding of the possibilities and the forces of regionalization in Europe. Should we be able explain dissimilarities with the level of economic development, we can expect that there won't be any cultural boundaries to the enlargement of the European Union and a cultural convergence will be possible with equalisation of the standard of living in all countries. On the other hand we may discover large differences between cultural zones which are independent of the level of economic development and in this case we may expect deepening of the regionalizational process in the Slavic-Orthodox world and stagnation of the integrational process with Turkey due to incompatibility of cultures.

Theoretical relevance

Whether we can explain the cultural differences and similarities with the countries' cultural heritage or with their degree of modernization is a question which has not only practical geopolitical but also purely theoretical relevance. The persistence of culture and the factors of cultural change are topics which have been a centre of a fierce debate in the scientific world but convergence in opinions has been only partially reached. The two main opposing camps

with this regard are those supporting the idea of convergence of global culture and those who argue that traditional cultures can persist the pressure of globalization. The proponents of a cultural convergence find theoretical justification in the modernization theory which claims that the process of socioeconomic modernization brings inevitably to the abandonment of traditional culture. Consequently, by utilizing modernization theory, it could be expected that the differences with regard to culture could be explained primarily with the level of economic development of the countries. The idea of social evolution implies a deterministic nature of cultural change: *"…social evolutionary pressures will force all societies to modernize, so that the major technological and cultural gaps between various parts of the world will greatly diminish in the future"*(Chirot, 2001, p. 341). Noncompliance to accept the modern Western values is seen respectively as a sign of "backwardness" which the history punishes with misery and suffering. Chirot concludes that *"the 'clash* [of civilizations]*' is largely a function of uneven modernization"* (p. 384). With regard to Europe, the position of cultural convergence is hold by the "European zealots" who view convergence of cultures on the continents as both desirable and inevitable (Beugelsdijk, Van Schaik, & Arts, 2006).

Sceptical about the cultural convergence idea are the proponents of what is broadly called a culturalist theory which views traditional culture as resistant to forces of globalization and able to accommodate to economic and technological modernization. This theory regards cultural differences as a result of the cultural heritage of the countries rather than the level of modernization. The most prominent spokesman of this school of thought is the American political scientist Samuel Huntington famous with his Clash of civilizations thesis (Huntington, 1993, 1996). According to his theory the post-war period will be dominated by a new kind of supranational political actors, namely 8 world civilizations, which are based on centuries-old religious and historical traditions. The uniqueness of the civilizations with regard to their culture and traditions, Huntington argues, becomes more apparent at present times when the contact between nations intensifies with the use of modern technology. Following this theoretical concept, we should be able to observe a clear distinction in Europe between the cultures belonging to each of the religious denominations.

An attempt to reconcile both theories is the study by Inglehart and Baker (2000) which arrives at the conclusion that socioeconomic modernization does change societal culture in a certain predictable direction; however, the cultural heritage of the countries also has a significant role in explaining cross-national cultural differences. The authors, therefore, conclude in favour of a revised modernization theory where national cultures are changing in

a rather parallel manner and cultural convergence cannot be expected in the foreseeable future. The two main schools of thought and the highly influential study by Inglehart and Baker serve as a theoretical basis for this research and they will be elucidated in more details in the literature review and in the theoretical framework.

State of art

What is 'culture'?

A central concept of interest in this Master thesis is societal culture. The term 'culture' has a wide application not only in science but also in everyday life. As it is a broadly used concept, its meaning is perceived as somewhat self-evident but this doesn't preclude the possibility of referring to it with completely different connotations. Culture has been described by Lane and Ersson (2002, pp. 19-38) as one of the broadest and vaguest terms in sociology and which has a variety of connotations. The authors distinguish between two general approaches to defining culture. The Old Cultural Theory regards culture as relegated to ethnicity, civilization and religion and it doesn't distinguish between the terms civilization and culture, only that the first has a slightly broader meaning or has higher level of advancement than the latter (Lane & Ersson, 2002).

The New Cultural Theory, however, views culture primarily as cultural values. Hofstede (1991), for instance, puts values in the centre of his 'onion diagram' while practices such as rituals, heroes and symbols are placed at a shallower layer of manifestation of culture. Schwartz (2006, p. 139), referring to previous theories on culture, summarizes that *"the predominant value emphases in a society may be the most central feature of culture"*. He adds that *"these value emphases express shared conceptions of what is good and desirable in the culture, the cultural ideals".* Summarizing previous research on the topic, Schwartz and Bilsky (1987, p. 551, as cited in Hitlin & Piliavin, 2004) explain the commonalities in the definitions of values: *"According to the literature, values are (a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance".* Hitlin and Piliavin additionally clarify the meaning of values by distinguishing them from attitudes, traits, norms and needs, the latter being less abstract than the values. Within this theoretical framework there is also a discord of what exactly cultural values ought to capture as well as on the number of unique cultural value dimensions. Hofstede (1980), for example, initially identifies 4 cultural dimensions: Power Distance Index, Individualism/Collectivism,

Masculinity/Femininity and Uncertainty Avoidance Index (Hofstede, 1980), to which he later adds a fifth dimension called Long- versus Short-Term Orientation (1991). Trompenaars (1993) on the other hand claims that there are 7 dimensions of national cultures: Universalism/Particularism, Individualism/Collectivism, Neutral/Emotional, Specific/Diffuse, Achievement/Ascription, Orientation in time and Attitudes towards the environment (as cited in Hofstede, 1996). Inglehart and Baker (2000) significantly simplify the variety of values arguing that there are only two unique value dimensions, namely Traditional/Secular-Rational and Survival/Self-Expression. Schwartz (2006) more recently identifies 7 interrelated cultural value orientations: Intellectual Autonomy, Affective Autonomy, Embeddedness, Hierarchy, Egalitarianism, Mastery and Harmony which form 3 unique cultural dimensions. Despite that different approaches obviously can capture more specific or more general elements of culture, many of the values overlap conceptually and are statistically intercorrelated. Therefore, even though I choose to employ only one set of values in my statistical analysis, these by Schwartz, the findings could be generalized to capture cultural differences in general. Accepting the dominating position of the New Cultural Theory, in the course of this text the terms 'culture', 'cultural values', 'value orientations' or simply 'values' are used interchangeably.

Huntington's idea of culture is closer to the Old Cultural Theory as he emphasises that the most important differentiation between civilizations are the religion, followed by history, language, culture and tradition (Huntington, 1993, p. 25). The objective and subjective characteristics of cultures are rarely distinguished throughout his works. Following this line of reasoning makes the answer to the question whether there are distinct civilizations in Europe self-evident – if there are separate religious denominations consequently there are different cultures. This way of conceptualization doesn't provide any settings for an empirical analysis. He, however, also claims that civilizations have distinguishable "*cultural preferences, commonalities and differences*" (1996, p. 21) as well as "*philosophical assumptions, underlying values, social relations, customs and overall outlook in life*" (p. 28) which is in line with the New Cultural Theory. An interest in this Master thesis is whether there is consent between the objective characteristics of a culture such as religion, language and history on one hand and subjectively expressed cultural preferences measured by individuals' values.

Previous research on culture

The determinants of cultural diversity and drivers of cultural change are one of the most commonly researched topics in sociology. Given the enormous number of studies on the topic, a thorough review on the existing literature would not be a trivial task. Instead of summarizing the voluminous literature on cultural values, I focus primarily on studies which meet certain criteria. Considered are only the most influential studies from the last 2 decades which make considerable theoretical as well as empirical contribution to the topic and which refer to each other, i. e. participate in the same sociological debate. An additional criterion is that they have a scope covering at least the whole continent of Europe which excludes the studies of Hofstede (1991) whose theoretical influence and relevance is beyond doubt but his empirical analysis doesn't include any Eastern European countries apart from Greece and Yugoslavia. To my knowledge there are 3 prominent studies which attempt to define, classify and explain cultures and all of them have a global scope. For the purpose of answering the research question posed here I focus only on the part which concerns Europe. It has to be emphasized that the differences in their findings could be at least partly accounted to the differing definitions of culture.

Huntington. Samuel Huntington (1993, 1996) proposes that there are clusters of countries with distinctive and persistent cultures which he names civilizations. His civilizations are based on two main characteristics: culture and a feeling of belongingness to a cultural unit (identity). This Master thesis deals only with the first characteristic of the civilizations - culture. The second characteristic would be also of a great if not even higher interest for sociology and political science but it is far beyond the scope of this study. With regard to Europe Huntington identifies 3 civilizations: Western (consisting of Protestant and Catholic countries), Slavic-Orthodox and Islamic. Therefore, the central distinguishing characteristic of each civilization is its religion. He is very specific on the line dividing the Western civilization from the rest – it goes through Europe from north to south between Finland and Russia, east of the Baltic countries, through Belorussia and Ukraine, dividing the predominantly Catholic Western parts of these countries from the Orthodox East, through Romania and Serbia, separating the Catholic Hungarian minority in these countries from the rest, and between Croatia and Bosnia and Herzegovina. This line in fact overlaps with the religious division in Europe to Eastern and Western Christianity established in 1054. The same line goes as well between major imperial powers in later European history – that between the Austro-Hungarian Empire and Poland on one hand and the Russian and Ottoman

Empires on the other. Therefore, according to Huntington the cultural division in Europe has been established centuries ago and has barely changed ever since. With the fall of the Berlin wall, he predicts, the differences will become even more acute and the short-living imprint of the communism will promptly fade away. Despite of its prominence, Huntington's theory has been most commonly regarded as 'controversial' (e.g. Gerhards, 2007). This, however, seems unreasonable bearing in mind that most of the serious research on the topic considers religion as a source of cultural differences which is the defining factor of Huntington's civilizations as well.

Inglehart and Baker. In one of the most influential studies on the topic Inglehart and Baker (2000) modify the well-established modernization theory by taking Huntington's propositions in consideration. Their overall findings reject the idea that culture can persist the process of modernization. The unique contribution they make is that they differentiate between two processes of value change. They argue that industrialization causes societies to abandon their traditional cultures and embrace more Secular-Rational values while the second societal change from industry to services brings a shift towards Self-Expression values. They use a modified version of Huntington's classification of civilizations in order to distinguish cultural groups with a particular position on their two-dimensional plot of Traditional/Secular-Rational and Survival/Self-Expression values, the left side of the dimensions characterizing economically undeveloped societies and the right – the advanced ones. Contrary to Huntington, they distinguish separate Protestant and Catholic European cultures and an additional English-speaking one. The Slavic-Orthodox group is replaces by an Orthodox one and the position of the single big Muslim country in Europe, Turkey, is in a South Asian cluster. An additional overlapping cluster encompasses the ex-communist countries regardless of their religious traditions. Even though they find significant differences between the cultural zones, they conclude the results in favour of modernization theory: "*economic development seems to move societies in a common direction, regardless of their cultural heritage*" (p. 30).

Schwartz. The Israeli social psychologist Schalom Schwartz (2006) employs a very different approach to measuring and comparing national cultures. The main advantage, he claims to offer, is that the cultural values are derived from *a priory* theorizing and later confirmed empirically and tested for cross-cultural equivalence of meaning. The 7 cultural value orientations, forming 3 dimensions (see Table 1 on page 35), which he proposes have an interrelated structure, rather than to be independent as are the Inglehart's value dimensions

(p. 179). Using the 7 cultural value orientations, Schwartz maps the world cultures on a plot with the use of multidimensional scaling technique. He distinguishes 3 main cultural clusters with regard to Europe which are substantially different from the previous two classifications: West Europe, English-speaking and East Europe with two sub-clusters (1) Balkan and more Eastern states, and (2) Baltic and East-Central states. One important inference which could be deducted from Schwartz' map is that the European countries appear to be spread on a very large cultural space as they cover around 75% of his global cultural map. Furthermore, Schwartz employs a path analyses and finds that socioeconomic development and demographic characteristics of the societies can predict the values on the cultural dimensions at a later time period.

Other studies. The majority of the remaining studies refer to the theories presented above offering modifications and or testing them empirically with different data, indicators and methods. It could be summarized that an association between economic development and cultural values is in most cases found while cultural heritage factors receive considerably less attention.

Gaps in the literature

Given the abundance of literature, it is a challenging task to identify significant gaps in the cross-cultural research. Despite of that I argue that there are a number of problems which have not been addressed properly in the analyses until now.

First of all, there is a high degree of vagueness as well as a lack of systematic empirical evidence in support (or rejection) of Huntington's theory. What makes Huntington especially difficult to interpret is the changing paradigms of what are the bases for distinguishing between his civilizations. In the case of the Slavic-Orthodox civilization it is not clear what the roles of Slavdom and Orthodoxy are. Do Orthodox countries which speak Slavic languages such as Russia, Ukraine, Belorussia, Bulgaria and Serbia, have a more 'special status' than the Orthodox countries where the spoken language is different than Slavic such as Romania, Greece and Cyprus? The latter are, nevertheless, included in his Slavic-Orthodox civilization, according to his map, but it remain obscure whether they constitute some sort of 'second tier' members which deviate to some degree from the core member states.

Another ambiguity is with regard to the so called 'torn countries' which have not decisively determined their place on the civilizational map. Huntington describes as such countries in Europe Turkey and Russia whose position is between the Western civilization and the Islamic and Slavic-Orthodox worlds respectively. If these countries are actually closer to the Western world then the whole continent of Europe will appear to be to a large extent culturally homogeneous and there will be no evidence supporting the distinction of Slavic-Orthodox as well as Muslim civilizations in Europe.

The second gap in the literature is that it hasn't been explicitly clarified what the mechanism of cultural differentiation between civilizations is. Throughout his famous book "The clash of civilizations and the remaking of world order" (1996) it has been claimed that there are distinct civilizations based primarily on the world religions and these civilizations have different cultures. In fact it hasn't been distinguished between the objective characteristics of the civilizations such as religion, language, common history and the actual culture of the countries which belong to the civilization. Therefore, it can be only presumed that religion, language and history make each civilization's culture different but it remains unclear through which mechanisms this relationship functions.

The third significant problem in the current state of art is the inconclusiveness of the study of Inglehart and Baker (2000). While acknowledging that cultural heritage does have an impact on the cultural values, their analysis doesn't provide much evidence of its effect compared to this of economic development. Their statistical analysis (p. 33) consists of 8 separate regressions each with only 1 dummy variable for a civilization and 3 variables operationalizing economic development (real GDP per capita, percentage employed in industry sector and percentage employed in service sector). In most cases there is statistically significant effect of each of the variables which makes them conclude that economic development has an 'independent effect' on cultural values even though civilizations also differ from one another. But does this analysis really control for the effect of civilizations? It might as well be the case that when all civilizational variables are included in one model they overshadow the effect of economic development. Without adequately controlling for alternative explanations it is statistically speaking incorrect to make decisive inferences of a causal relationship between factors and outcomes (Dietz & Kalof, 2009, p. 187).

This leads to the main and most significant weakness in the current research on cultural differences, that is, it virtually entirely relies on cross-sectional analysis which inevitably

suffers from a number of serious shortcomings. The most significant disadvantage of cross-national methods is that they are unable to address the problem of omitted variable bias. This means if variable X is correlated to variable Y it could be the case that there is a third variable C which causes both. Unless we know about, and are able to include, all possible third variables in the model, we cannot claim that X has an independent effect on Y. As Inglehart and Baker (2000, p. 40) correctly notice *"…cross-national cultural variation is closely associated with a society's level of economic development and its cultural heritage. Are these merely cross-sectional patterns? Only time-series data can answer this question conclusively."* Their attempt to answer the question is yet not employing a longitudinal statistical analysis. Instead they plot the countries on the same two cultural dimensions but include two time-point observations for each country. This way they demonstrate the change in cultural values within the same country for a period of 5 to 17 years. They conclude that there is a general tendency for the countries to move towards the top-right corner of the graph, meaning to embrace more Secular-Rational and Self-Expression values even though the pattern doesn't seem as clear as it is has been described. The reverse development in the ex-communist countries is well explained by the economic hurdles in these countries in the first years after the political and economic reforms. Despite of the obvious strong economic development elsewhere during this period, in Brazil, China, Ireland, India, Italy, Northern Ireland, Spain, South Africa, South Korea, Turkey and USA, curiously, there is a change towards more traditional values. Yet, these opposite to the expectations developments, which are unlikely to be simply a random error, remain unexplained. This illustrates how misleading the results from a cross-sectional analysis could be. It is possible that we find positive relationship between economic development and certain values but at the same time economic growth might actually bring change in the opposite direction of the same values.

A second important problem in cross-sectional research is that it assumes independence of the observations from one another, that is, countries do not interact and there is no cultural influence between countries which is, of course, very unlikely. Most of the researchers attempting to classify world cultures inevitably end up using geographical terms in order to give names to their cultural clusters (e.g. Latin American and African civilizations (Huntington, 1993), Catholic and Protestant Europe, Latin America, South Asia and Africa (Inglehart and Baker, 2000), West Europe, East Europe, East Asia, Latin America, Middle East and Africa (Schwartz, 2006)). The possibility that value spread through diffusion, sharing and migration, however, has received negligibly small attention in the literature.

Dobson and Gelade (2012) claim to be the first to utilize a spatial autocorrelation model in cross-cultural research in order to quantify the effect of a number of geographical as well as ecosocial variables. Their statistical analysis demonstrates that a strong spatial dependency exists with regard to a wide range of cultural variables across nations.

How can this Master thesis contribute?

Having outlined the main gaps in the current literature, in this Master thesis I offer some theoretical and methodological improvements which to address the described problems. First of all, I will make proposition as to what the mechanism behind the Huntington's theory might be. Second, I will empirically examine the validity of Huntington's theory with regard to cultural value differences in Europe and attempt to clarify the ambiguities. Third, I will test critically the postulates of modernization theory that economic development brings change in cultural values in a certain direction. This will be done by including relevant alternative cultural heritage factors in the same regression analyses and by employing a more advanced fixed-effects method which is able to control for all unobserved time-invariant characteristics of the countries and estimate the pure effect of economic development on cultural values. Additionally, in this analysis I focus only on Europe but I use a dataset which contains the vast majority of the countries in the continent, with other words, I reduce the scope but examine the problem in greater details compared to the studies mentioned in the literature review.

Outline of the Master thesis

This Master thesis is structured as follows. It started with an introduction where I placed the research question in current geopolitical and sociological debates, presented the most influential studies on the topic and identified problems which haven't been addressed extensively enough. In the next chapter I present the theoretical framework where I explain the mechanism through which each of the cultural heritage as well as economic development factors are possibly associated with cultural values. The consequent chapter presents the data, indicators and statistical methods which will be employed in order to answer the research questions. The empirical results chapter is divided into 3 main parts. The first part presents the results from a multidimensional scaling technique which is utilized to explore the explanatory power of each theory and to identify tendencies. In the second subchapter I employ a linear regression analysis to examine statistically which theory offers better

explanation of the cultural (dis)similarities between the European countries. Finally, I use longitudinal analysis to test for the effect of economic development on the cultural value dimensions while controlling for observed and unobserved heterogeneity between countries. The Master thesis finishes with a summary, discussion and suggestions for further research.

Theoretical framework and hypotheses

The outline of the theoretical framework is divided into two main parts – one for each competing theories – starting with the clash of civilizations and continuing with modernization theory.

The Clash of civilizations

As it was mentioned in the previous chapter, the causal link in Huntington's theory between religion and the other objective characteristics of civilizations such as history and language on one hand and the culture and values on the other hand remains not explicitly explained. An interest in this Master thesis is to analyse whether such a link exists, i.e. there is a consent between religion, history, language and culture, as Huntington proposes. Such a relationship has been empirically proven in a number of analysis even though there is little said about the causal mechanism. A theory is required in order to be able to draw inferences about a causal relationship, otherwise it could be argued that these factors are associated by coincidence or there are others which cause both predictor and predicted outcomes.

Mechanism

A central argument in the theoretical framework is that both direct and indirect effects of the cultural heritage factors must be considered. The direct effect of the factors has been comparatively more frequently outlined in previous studies; the indirect effect, however, has been neglected in the current research. The argument of an indirect effect is that commonalities between nations predispose them to interact more intensively with each other and consequently mutually influence their cultures. To elaborate on the so proposed indirect causal link between commonalities and cultural similarities, it is required to divide the argument in two main parts and examine each of them separately: (1) common religion, language and historical traditions lead to more intense interactions between nations and (2) interaction between nations brings cultural convergence through diffusion and mutual cultural influence.

To start with the first argument, there are a number of possible reasons why likeness results in more intensive interaction between countries. An important hint in Huntington's theory is the argument that religion, language and historical legacies are crucial elements of people's identity, that is, people who share these commonalities have a feeling of mutual closeness. It is logical to assume that this feeling of closeness results in actual bringing together of nations. According to Huntington (1993, 1996) the civilizational consciousness is the founding ground for the formation of regional economic and political associations such as the EU, NAFTA and ASEAN. A similar argument is that *"similarity breeds connection"*, also known as the homophily principle (McPherson, Smith-Lovin, & Cook, 2001). In their highly influential work McPherson et al. suggest that this principle is applicable to a wide variety of social interactions such as *"marriage, friendship, work, advice, support, information transfer, exchange, comembership, and other types"* (p. 415). Zhou (2011) expands the argument to a national level and finds that commonness with regard to culture (civilization), political regime and geography has a positive impact on trade relationships. Furthermore and more specifically, it has been argued that sharing the same religion facilitates bilateral economic interactions by creating *"networks of trust and familiarity"* (Lewer & Van den Berg, 2007, p. 767) which reduces transaction costs (Lee, 2013), while sharing the same language as well as language similarities have also fostering effect on international cooperation as they ease the communication and again reduce transaction costs (Lohmann, 2011; Selmier & Oh, 2013). The effect of historical divisions such as this of Eastern and Western Roman Empires, and this of communist and democratic blocs during the Cold War have obviously also influenced the direction of between country interactions. On both sides of the so called Iron Curtain countries engaged in political, economic and military alliances while the interaction with the countries of the opposite bloc was seriously limited. Language similarity, religion and history are of course naturally interwoven with geographical proximity and therefore their effects are likely to overlap to some extent. Nevertheless, there is significant evidence that language and religion have independent effect on between country interactions which will be discusses in more details in the next subchapters.

The second main part of the causal chain is that international interactions bring convergence in values. The argument that culture can be diffused through national borders is well known in the literature as the Galton's problem (Naroll, 1973). While being indeed a problem for cross-national research, it strengthens the argument made here that cultural values can be and are very likely transmitted across borders. Such a spatial dependence in cultural values is

confirmed by a solid empirical analysis by Dobson and Gelade (2012). What is more, some authors like Bonikowski (2010) argue that cross-national interactions, particularly economic, political and migratory, result in cultural convergence, independently of the effect of sharing a geographical area. This argument is supported with a cross-national and panel (fixed-effects) relational analyses covering 19 countries in a period of 10 years which proves that economic relations (bilateral trade flows) and political cooperation (membership in the same international organization) bring national cultures closer together. The possible direct and indirect effects of each of the cultural heritage factors considered in this analysis will be discussed in greater details in the following subchapters.

Religion

Religion has been often used in previous research as an explanatory factor of cultural differences. Among the first to propose that religion has an influence on people's values is Max Weber (1958) who attributes the burst of capitalism to the values originating in the Protestantism. Summarizing the existing literature on the factors influencing culture, Hitlin and Piliavin (2004) state that there is limited research which directly links religion and values. Nevertheless, they share the view expressed by Maio, Olson, Bernard, and Luke (2003) that religions are in fact ideologies which *"subsume attitudes and values"*. One view proposed by Bonikowski (2010) is that cultural similarities might be a result of shared religion *"through common ecclesial institutions or shared doctrinal principles"* (p. 336).

An alternative view expressed by Hofstede (1991) and Minkov (2007) is that it is not the religion which influences culture *per se* but it rather reinforces previously existing cultural differences. Hofstede (1991) supports his argument with the fact that all major religions have experienced schisms which he believes reflect pre-existing cultural divisions. Referring to Europe, Hofstede emphasizes the importance of the inheritance of the Roman Empire. The Great Schism of 1054 for example could be traced back to the division of the Roman Empire on eastern and western part in the 3-4th century AD. The success of the Protestantism, he argues, was possible only in the northern parts of Europe which haven't inherited the legacies of the Roman Empire as they have not been an integral part of it. Therefore, religion could be also employed as a proxy which captures historical events and processes such as the dominance of the Roman Empire, the division of the empire, the Great Schism, the Reformation and the Counter-reformation. Hence, it is viable to assume that religious

denomination captures a great deal of the historical traditions of the countries which are also given important role in the formation of Huntington's civilizations.

Along with the possible direct effect, it can be suggested that shared religion as a commonality facilitates closer interactions between countries which additionally results in convergences of the respective countries' cultures. This view is supported by Lee (2013) who claims that shared religion improves bilateral international trade through its institutional and network effects. He concludes that *"religion establishes co-religious networks that positively affect interpersonal trust, thereby reducing institutional distances between countries"* (p. 1001). What is more, his empirical analysis suggests that the effect of religion is even stronger than this of deliberately created regional trade agreements. The same view is shared by Lewer and Van den Berg (2007) who take the stance that followers of the same religious denominations establish interpersonal trust more easily which creates networks and facilitates international economic transactions. Their empirical analysis provides evidence that most world religions indeed increase the amount of trade between countries with the same predominant religion. Further empirical support is provided by Kang and Fratianni (2006) who find that sharing the same religion (Christianity or Islam) is a significant factor influencing bilateral trade through its feature of reducing transaction costs.

As it was discussed, there is no consent in the scientific literature whether religion has a direct or indirect effect on culture, it has been preceded by existing cultural differences, or it reflects historical processes and events. Despite of that there is overwhelming empirical evidence that such a link exists. Inglehart and Baker (2000), for example, utilize a modified version of Huntington's classification of civilizations which are in most cases based on religion and find that this factor has a significant effect on the country's culture. Jürgen Gerhards (2007) also employs religious denominations as explanators of cultural differences with regard to religion, family, economics, welfare state and civil society in Europe and finds statistically significant effects, adjusting for the effect of socioeconomic development, political-institutional system and other factors. A wealth of research has also considered religious denomination as an important source of value differences and finds statistically significant effect while controlling for alternative factors such as economic development (e.g. Beugelsdijk et al., 2006; Cohen & Hill, 2007; Yuchtman-Yaar & Alkalay, 2007; Tang & Koveos, 2008).

To summarize, there are at least 4 mechanisms through which religious denomination is possibly linked to cultural values:

1. Religion viewed as an ideology directly influences people's values
2. Religions have been created and altered to reflect pre-existing value patterns
3. Religious denomination as a proxy of historical events and processes such as the Great Schism and the Reformation
4. Shared religion as a source of commonness which facilitates more intense interactions through increased familiarity and trust

As Huntington assigns religion a top importance for the formation of his civilizations, we can expect that religion will be the single most important factor which explains cultural division in Europe. Predicting the precise direction in which each religion affects culture is not that straightforward due to the ambiguity of religious texts. As Gerhards (2007, p. 44) remarks, it is not the task of sociologist to *"judge the accuracy of different interpretations of the Bible or the Koran"*. This view is shared by Hitlin and Piliavin (2004) who express the opinion that religious denominations, understood as ideologies, can contain elements which contradict each other. Despite that there are many clues as to what this direction might be, e.g. Protestantism promotes autonomy (Cohen & Hill, 2007), it won't be hypothesized which cultural values will be affected by each religious denomination due to the reasons stated above and the proposed manifold links between the two. Since the division between Eastern Orthodoxy and Western Christianity emerged much earlier in time compared to the split within the Western Christianity on Catholicism and Protestantism, it can be anticipated that the cultural differences within the last two won't be as pronounces as between them and the Orthodoxy. The Islam, as a completely separate religion with traditions which can be traced back to the 7th century, is expectedly even further diverging form the rest. Following Huntington's theory closely, it will be hypothesized that

religion has a strong impact on cultural values and there are distinct Western Christian, Orthodox and Muslim cultural clusters in Europe (Hypothesis 1A).

Language

Language is relatively less often used in explaining cultural differences and consequently it requires more elaboration on its relevance. It is one of the most important factors of the structure of the civilizations according to Huntington and it is commonly used in the

interpretation of his theory. The name of the Slavic-Orthodox civilization implies that it is not only the religion but also the language similarities or the kinship ties (which are interrelated) that are important in the formation of civilizations. Inglehart and Baker (2000) and Schwartz (2000) also use language as one of the bases for a cluster formation. In their research exists, however, a so called 'English-speaking' cultural zone which comprises of countries which share exactly the same language rather than a language family as in the case of the Huntington's Slavic-Orthodox civilization. Language is also one of the three most important factors in the formation of cultural groups according to Ronen and Shenkar (2013) who use cluster analysis in order to map world cultures.

There are a number of possible mechanisms which could explain why language similarities might have an influence on the formation of a distinctive culture. Ronen and Shenkar (2013) consider a direct effect of language on culture. The reason behind it is that certain cognitive processes as well as the ways we conceptualize the world are influenced by the language we speak. For instance, whether there are formal and familiar forms of 'you' in the language may have an impact on cultural values such as Power Distance in Hofstede's research (1991).

Most likely, however, the main effect of language, as a *"vehicle to transmit cultural values"* (Selmier & Oh, 2013), is that it determines the possibility for interpersonal communication. In the case of sharing the same language it is apparent that it opens the opportunity of intense interaction which may result in a diffusion of ideas and values. This can easily explain the clustering of the English-speaking countries on the cultural map of Inglehart and Baker (2000), Schwartz (2006) and Ronen and Shenkar (2013) despite of the enormous geographical distance between these countries. A voluminous amount of empirical research consistently identifies shared language as one of the key factors facilitating international economic cooperation (e.g. bilateral trade) (Kang & Fratianni, 2006; Melitz, 2008; Tadesse & White, 2010; Lee, 2013; Selmier & Oh, 2013). A meta-analysis by Egger and Lassmann (2012) attempts to summarize previous findings and concludes that a common language accounts for as much as 44% direct increase in bilateral trade.

Given the language diversity in Europe, however, sharing a common language is not a particularly comprehensive tool in explaining cultural clustering. Countries with identical predominant languages in the dataset used in this research are only Great Britain and Ireland (English), Germany, Austria and Switzerland (German), Greece and Cyprus (Greek) and

Netherlands and Belgium[1] (Dutch). Therefore, language similarity might be a more useful concept in explaining cultural differences in Europe. Selmier and Oh (2013) explicate that there are three possible mechanisms through which language similarity improves international communication. First of all, similar languages are easier to acquire and therefore this increases the probability that a larger proportion of the population would speak the language, a view also supported by Hutchinson (2005). Secondly, similarities in vocabulary and grammatical patterns increase the chance that the language will be understood to some extend even without investing efforts in the acquisition of the language. These two assumptions are easily testable with available data. Being placed in similar international environment during the Cold War, Eastern European countries where one of the Slavic languages is spoken are much more likely to speak (or at least understand) Russian language[2] (ranging from 8% in Slovakia, Czech Rep. and Poland to 19% in Bulgaria where Cyrillic alphabet is also used) compared to Non-Slavic-speaking countries such as Hungary (1%) and Romania (2%)[3]. Another example is the choice of country for migration of Romanians who prefer other Romance-speaking countries such as Spain and Italy (Ionescu, 2008) not necessarily because they have previous knowledge in the respective languages but the language similarity makes some simple form of communication possible or mastering the language more effortless. The third mechanism proposed by Selmier and Oh is that speakers of similar langauges are more likely to communicate with the use of a so called 'pidgin' language which is developed on the basis of the two languages. Through any of these mechanisms langauge similarities decrese transaction costs of communication which enables the diffusion of values across borders.

Moreover, language similarities might influence values through the previously mentioned homophily principle according to which similarities increase the probability of people to connect. As language is one of the most important elements of people's identity (Lohmann, 2011), it is very likely that language similarities result in some loose or tight form of a common identity. Analysing the effect of language on international trade, Lohmann (2011), for exaple, concludes that *"people may naturaly preffer to trade with others who speak*

[1] Belgium is considered a predominantly Dutch-speaking as the majority of the population speak this language, even though French and German have equal statuses

[2] Data from TNS Opinion & Social (2012). The exact question asked: *"Which language other than your mother tongue do you understand well enough to follow the news on radio or television?"*

[3] The comparison doesn't include Eastern European countries which were not part of the Soviet Bloc such as Slovenia and these that were part of the Soviet Union such as Estonia, Latvia and Lithuania.

similar languages because they often have other things in common, such cultural or historical ties".

Another possible reason why language similarity might be related to cultural similarities is that it implies kinship ties, or with other words - a common origin. Since Huntington sets forth that civilizations are formed centuries and even millennia ago, then common origin would imply sharing the same values at some historical time point and therefore the divergence from this shared culture in the past would be less salient in these countries nowadays.

Furthermore, language similarities, understood as kinship ties, indicate genetic bonds. Whether certain cultural values have some biological predisposition is not a new question in comparative sociology. Minkov (2007) argues that biology has been unjustifiably neglected when explaining cultural differences but he adds that genetic analyses so far don't provide sufficient evidence neither for nor against biology as an explanatory factor. Empirical analysis by Hofstede and McCrae (2004) contribute to this debate by finding strong correlations between cultural value dimensions and personality traits. The authors acknowledge that it is debatable to what extend personality traits are rooted in biology but among the theories, the Five-Factor Theory particularly underlines biology as the *only* base for personality traits. Consequently, cultural differences may as well be explained to some extend by genetic predisposition in case there are systematic differences in the mean levels of personality traits between geographic regions or ethnic diaspora. A study on the topic reveals that indeed the Big Five Personality Traits are distributed unequally among geographic regions, despite that the authors admit certain data limitations (Schmitt et al., 2007). Acknowledging that the modern European nations consist of a great variety of intermingled ethne, it is arguable whether language similarities can be used as a reliable measure of genetic relationship. In some cases, however, this notion might be applicable and provide relevant insight in explaining cultural similarities. Estonia and Finland, each belonging to the Uralic language group, for example, are found to share two thirds of their genetic background (Nurmi & Üksvärav, 1994). This fact makes Dobson and Gelade (2012) to conclude that the cultural similarities between Estonians and Finnish can be attributed to their common origin, despite of the fate of Estonia to be part of the Soviet Union for about half of a century.

It needs also to be acknowledged that language similarity in most cases goes hand in hand with geographic proximity and consequently its effect on cultural similarities is inevitably

inflated. In the current analysis such a spurious relationship between language proximity and culture could be possibly detected in the case of countries which belong to the same language family but are not closely located to each other, such as Hungary and Finland or Romania and Spain. Additionally, the empirical studies examining the effect of language similarity on international economic relationships include control variables for geographical distance and contingency among other possible alternative explanations and they find independent and statistically significant effect (e.g. Hutchinson, 2005; Selmier & Oh, 2013).

To summarize, the main channels through which language and language similarities possibly influence culture are:

1. Language influences the cognitive processes of individuals
2. Language similarity reduces transaction costs of communication through:
    a. Ease of acquisition of the language
    b. Ease of understanding without acquisition of the language
    c. Ease of developing a 'pidgin' language
3. Language similarity as a source of identity which facilitates interactions
4. Language similarity as a proxy for common origin
5. Language similarity as a proxy for kindred ties

Following the above discussion it can be hypothesized that

language proximity is an important complementary factor in explaining cultural differences in Europe (Hypothesis 1B).

Communist past

History is also described as one of the key elements of the Huntington's civilizations. It is, however, much more difficult to measure and test its effect empirically. Which historical events or processes are indeed these that separate or bring together the European cultures? When Inglehart and Baker (2000) interpret Huntington they distinguish between ex-communist and non-ex-communist European countries without giving explicit arguments why communism would be an important factor explaining cultural differences and how they derived it from Huntington's theory. Huntington in fact devaluates the effect of communism by stating that the actual line dividing Europe is not anymore the former 'Iron Curtain' but it is the so called 'Velvet Curtain' which divides the Protestant and Catholic Western Europe from the rest of the continent. The communism, nevertheless, is the most important recent

historical division in Europe which surely has had some influence on the national cultures in the continent. It could be argued that Huntington refers mainly to the question of identity when he proposes the new dividing line in Europe. People's identity in the Central and Eastern European countries was clearly expressed by the overwhelming popular support for joining the EU shortly after the fall of the Berlin Wall. Communism, nevertheless, might have put its stamp on the culture of the countries it used to encompass for nearly half a century and even longer for other Eastern European countries which will require a longer period to fade away.

This factor labelled as 'political-institutional system' is used in Gerhards' research (2007) as a tool for explaining cultural differences in Europe. The argument behind is that different political institutions influence people's values through propagating its policies and encouraging or enforcing certain norms of behaviour. Schwartz and Bardi (1997) also propose that there is a direct effect of the communist ideology which was educated through the whole life-course of individuals for decades. It will be logical to assume that communism, as a far left ideology, should have promoted values such as egalitarianism and rejected hierarchical structure of societal organization. Democratic ideology respectively is usually associated with institutions which enable the individual to make free choices and this way promoting the autonomy values (Welzel, Inglehart, & Klingemann, 2003).

It has been argued, however, that the communist ideology hasn't had a very profound effect on people's minds as it has been largely rejected, especially in the Central European countries (Schwartz & Bardi, 1997). Instead it has been argued that it has a strong influence on people's values through the economic and social conditions which it has created. Schwartz and Bardi expound that there are two causal mechanisms which explain this link – acclimation and compensation. Central and Eastern Europeans have adopted to the life circumstances which were created by the communism even in the cases when the official ideology was rejected by the population. Communist ideology for example didn't provide much incentive for individual achievement which blocked the persuasion of values such as mastery and individualism, Schwartz and Bardi argue. While ideologically speaking one of the main postulates of communism is to remove the social classes and create an equal society, in reality the society was organized in a hierarchical structure which legitimised social privileges. Values such as egalitarianism, therefore, remain rudimentary despite of the official ideology. As a typical totalitarian political system, it encouraged obedience of the individual

to the collective and, therefore, promoted values such as embeddedness while hindering intellectual and affectual autonomy.

Similarly to the argument about religion, Minkov (2007) argues that it was not the communism which enforced certain values to the East European societies but rather the pre-communist Russian culture created the communism. This is a reasonable assumption bearing in mind that the form of communism which was developed in the Soviet Union differs significantly from the original postulates of Marx and Engels. This could also explain why the communist rule was embraced more easily in some societies such the former Russian Empire and the Balkan states and opposed in the Central European countries (Schwartz & Bardi, 1997) whose culture supposedly differed more significantly from this of the Soviet Union.

Additional argument is that certain cultural characteristics have been diffused from the Soviet Union which was dominating the Eastern Bloc countries independently from the ideological influence. This was achieved not only by the export of material culture such as printed books, movies, architecture and so on but also through the role of the subordinated local communist governments which were obediently copying the Soviet model in their own countries. This process has been described by some authors as *'Soviet cultural colonialism'*, *'organized cultural domination'* and *'cultural sovietisation'* (Fatu-Tutoveanu, 2012). The Western Bloc countries, respectively, were significantly exposed to American culture which was completely absent in Eastern Europe. Dean (1997) outlines 4 mechanisms through which American culture have penetrated Western Europe in the post-Second World War period: American military forces in Europe, tourism, propaganda and mass media. Consequently, the American influence which was not present in Eastern Europe additionally disintegrated the cultures of the countries on both sides of the Iron Curtain.

Furthermore, it is reasonable to assume that there wasn't just one way cultural influence from the Soviet Union to its 'satellites' but there might have been mutual exchange of culture. The reason is that the countries from the Eastern Bloc were bind together in all spheres of political, economic and cultural life, while the influence from abroad was seriously hindered. The cooperation in the Council for Mutual Economic Assistance (COMECON) for example facilitated a close economic cooperation, while the Warsaw Pact fostered political and military connections. Tourism and migrations have been also limited, and in many cases encouraged, within the boundaries of the communist world. Similar processes were taking

place in Western Europe too, namely the formation of the European Community which fosters economic cooperation and mobility within its boundaries as well as NATO where the Western Allies cooperate in the spheres of politics and defence.

The process of mutual cultural influence in Eastern Europe, however, might not be limited only to the period of communist rule. The long exposure to the communist ideology and the experience of similar life conditions constitute communalities which could possibly breed mutual connection in the decades following the fall of the Berlin Wall. Despite of the apparent change to democracy, feelings of nostalgia to the old times are common in all post-communist societies. Therefore, the process of mutual cultural influence might continue after the political changes and the disbandment of COMECON and the Warsaw Pact through people's identity and feelings of nostalgia.

In short, communism is supposedly related to cultural values in the following ways:

1. Communist ideology directly influences cultural values
2. Adaptation mechanism of the people to the life conditions created by the communism
3. Communism presenting and reinforcing previously existing value patterns
4. Diffusion of cultural values from the Soviet Union and absence of American cultural influence
5. Exchange of cultural values among the Eastern and Western bloc countries
6. Communist past as a communality and source of identity in the post-Cold War Era

Following the above discussion, it is arguable whether experiencing communist should be defined as a civilizational factor as it doesn't strictly follow the Huntington's line of reasoning but in any case it is an important factor which is worth considering as an explanator of cultural heterogeneity. What is more, experiencing communism is a factor conceptually different from the modernization theory postulates. While countries can generally develop economically, historical traditions, just as religion and language, are considerably constant over time and therefore it is more reasonable to consider communism as a civilizational (or cultural heritage) factor. We will expect that

countries which experienced communism in the last century have more distinctive culture than the countries which were located on the other side of the Iron Curtain (Hypothesis 1C).

To summarise, if Huntington's theory is viable, we will notice large cultural value distances between clusters of countries which could be explained mainly by the religious denomination

in the country and complementary by language and experiencing communism. We will be able to distinguish a separate Western European cultural unit consisting of all Protestant and Catholic countries, and Slavic-Orthodox and Muslim ones.

Other factors

In this Master thesis it is argued that religion, language and communist past are the main cultural heritage predictors of cultural differences and similarities in Europe but is this an exhaustive list of country-specific factors? They are likely to capture most of the effect of history and traditions on culture, however, there are certainly other factors which are relevant. Huntington draws the attention to the large multinational empires in Central and Eastern Europe as bases to distinguish between his civilizations. Countries which have been part of the Russian Empire are of course likely to be influenced by Russian culture, the same as the Central European countries by the Austrian culture and the Balkan countries by the Islamic culture. Having been part of an empire is found to be statistically correlated with cultural similarities in a study by Bonikowski (2010). The European history is far more complex than any statistical model could possibly estimate. Most of the European countries have been part of one and then another empire at some period of time. It is not only the duration and the recency of the event that matters but also the nature of the relationship between the dominant and dominated cultures. A country may have different status within an empire or to be in different form of dependency position (e.g. vassal), or even be formally independent but still be subordinated to another state. Historical events could be also interpreted subjectively.

Certain country-specific characteristics which cannot be described as cultural heritage are also supposedly influencing cultural values. Geographical proximity, for instances, is a key factor in the hypothesis of diffusion of values. Virtually all empirical analyses on trade relationship outline the importance of geographical proximity as well as adjacency as promoters of economic cooperation. Religion, language and communist past certainly capture a large portion of the effect of geographic proximity and consequently their effect is inevitably inflated for this reason.

Other geographical and ecological factors are also supposedly related to certain cultural characteristics. Dobson and Gelade (2012), for instance, draw the attention to such characteristics as similarity in latitude, similarity in climate, temperature and precipitation

and conclude that geographical location is as important as religion and economic development in explaining cultural similarities globally.

Therefore, there are various other factors specific to each country which may have influence on cultural differences and similarities. Due to the variety and the complexity of these additional predictors, their relevance will not be estimated in this empirical analysis. The effect of all time-constant characteristics of the countries, however, can be successfully controlled for in the fixed-effects model which will be done in part III of the empirical analysis. This way we will be able to estimate the pure effect of economic development while holding constant not only religion, language and communism but all other specificities of each of the European countries.

Modernization theory

Mechanism

Modernization theory stands on a principally different position with regard to the explanation of cultural differences. This theory has long traditions and it has been occasionally modified and therefore it must be acknowledged that there is certain variation among its proponents. Nevertheless, a central feature is that (socio-)economic development is a driving force for a profound value as well as institutional change in societies. The theory originates from Marx (1973) who claims that the industrialized societies demonstrate the developing ones the direction of development (Inglehart & Baker, 2000). Following a more recent economic change, Bell (1976) builds on Marx' theory with the concept of 'post-industrial' society which is also associated with social and cultural change. This concept is further developed by Ronald Inglehart (1977, 1990, 1997) with the idea of a postmaterialist society and postmaterialist values. Both notions are operationalized in the famous work of Inglehart and Baker (2000) with the use of the so called Traditional/Secular-Rational and Survival/Self-Expression value dimensions. According to the authors, industrialization is a process of harnessing the nature and thus devaluating the divine interpretation of the world. Therefore, industrializing societies experience a profound cultural change from Traditional to Secular/Rational values. The second major economic shift is from industrial to post-industrial society where industry is superseded by the service sector of the national economies. In this conditions people are exposed to work with other people and with information and concepts where the abilities to make independent judgements and express opinions become highly demanded. Thus, Inglehard and Baker claim that the rise of the service economy results in a

second cultural change – from Survival to Self-Expression values. These concepts are tested empirically with the use of two measures: economic development and share of the labour force in industry and services. Their results suggest that economic development results in a pervasive change in both cultural dimensions regardless of the cultural heritage of the country. Welzel et al. (2003) strengthen the postulates of modernization theory by depicting a coherent structure of human development a central element of which is individual's choice. The process originates with socioeconomic development which provides the individuals with economic, cognitive and social resources breeding respectively materially, intellectually and socially independent individuals (Inglehart & Welzel, 2005). The satisfaction of these individual needs nurtures *"a sense of existential security and autonomy"* which *"leads people to give priority to humanistic self-expression values that emphasize human emancipation, giving liberty priority over discipline, diversity over conformity, and autonomy over authority"* (pp. 151 – 152). The prevalence of such emancipative values which place individuals' choice in its centre results in people demanding the respective democratic institutions which to guarantee individual rights. Consequently, according to modernization theorists, the whole process consisting of 3 stages - from economic development to emergence of emancipative values and to establishment of effective democracy - is a coherent process of human development. Within the topic of this Master thesis, we are, of course, interested primarily in the second stage of the chain – this between economic development and change in values in certain predictable direction.

The modernization theory is not only well-established theoretically but also proven empirically in numerous studies with a variety of operationalizations of culture (among many others Smith, Dugan, & Trompenaars, 1996; Georgas, van de Vijver, & Berry, 2004; Beugelsdijk et al., 2006; Schwartz, 2006; Yuchtman-Yaar & Alkalay, 2007 Dobson & Gelade, 2012). To my knowledge there are virtually no empirical studies which disconfirm the relationship between economic development and cultural values.

Since in this analysis culture is operationalized by Schwartz' 7 cultural value orientations, it is important to elucidate how they are supposed to be associated with economic development. To this end Schwartz (2006) juxtaposes his value dimensions with Inglehart and Baker's ones. Traditional/Secular-Rational dimension, for instance, is conceptually overlapping with Schwartz' Autonomy/Embeddedness and to some lesser extend to Egalitarianism/Hierarchy dimensions as they all focus on the relation towards authority and they are proven to be statistically correlated. Despite of no obvious conceptual overlap, this Inglehart and Baker's

cultural dimension is positively (even though not strongly) correlated to Harmony/Mastery dimension as well. Survival/Self-expression dimension respectively is highly interrelated to Autonomy/Embeddedness dimension as they capture the degree at which the individuals express their individuality and thoughts. This dimension is also positively correlated with Egalitarianism/Hierarchy and there is no relationship to Schwartz' third dimension Harmony/Mastery, despite of obvious conceptual overlap as Harmony and Self-Expression values both capture environmental concern, among other aspects. Having outlined these parallels, it can be assumed that economic development will be positively related to Autonomy and Egalitarianism and somewhat less strongly to Harmony, and negatively to Embeddedness and Hierarchy, and Mastery to a smaller degree. As hypothesized, Schwartz (2006) finds economic development to be a very strong predictor in explaining differences with regard to Embeddedness/Autonomy and Egalitarianism/Hierarchy but not to the Harmony/Mastery dimension. Following the above discussion, it will be hypothesized that

there are gradual cultural differences between the European countries which reflect their level of economic development (Hypothesis 2).

Particularly, economically developed societies can be anticipated to rate highly Egalitarianism, Intellectual and Affectual Autonomy and Harmony, while pooper countries emphasize the opposite ends of the cultural dimensions - Hierarchy, Embeddedness and Mastery

Why economic development might not be relevant in explaining cultural values?

In case we are not able to observe systematic cultural differences between the economically affluent and the poorer countries once we control for the effect of alternative factors, we need to be able to explain why such link might not exist. To this end we turn to the critiques of modernization theory and particularly to the famous Clash of civilizations thesis.

Huntington restrains himself of depicting a causal relationship between economic development and culture. His argument is that Western civilization has its own distinct culture and it happens to be at the same time economically developed. In his words *"The West was the West long before it was modern."* (Huntington 1996, p. 69) and therefore the distinctive characteristics of the Western culture are independent of its economic development. Furthermore he distinguishes between the processes of westernization and

modernization and claims that traditional culture does not necessarily need to be given up in return for modernization:

"Western civilization is both Western and modern. Non-Western civilizations have attempted to become modern without becoming Western. To date only Japan has fully succeeded in this quest. Non-Western civilizations will continue to attempt to acquire the wealth, technology, skills, machines and weapons that are part of being modern. They will also attempt to reconcile this modernity with their traditional culture and values"(Huntington, 1993, p. 49).

Similar view is supported by Michail Minkov (2007) who claims that the only cultural value which is associated with economic wealth is individualism. He argues that "*some cultural differences exist not for decades but surely for* ***centuries****, and others – for* ***millennia****! The Scandinavian literature from X – XIII century reveals the same closeness between employers and employees and the same uncompromising attitude when the employer asks for unreasonable things as in present"* (pp. 19 – 20; in Bulgarian, translation mine; bold original).

This line of reasoning is problematic for modernization theory because it is a fact that most affluent societies at present also belong to the supposedly distinguishable cultural unit of the Western civilization. Valuable insights with this respect, however, can be derived from analysis of the few exceptions of economically developed societies which are not Western. The most prominent and suitable example is Japan as well as some other East Asian countries. In Inglehart and Baker's (2000) map of the world presenting the cultural distance between countries with regard to their two cultural dimensions, Japan is curiously very closely located to the European Protestant countries, which gives support to the modernization theory postulates. Worth mentioning, however, is that Japan is not far distant culturally from the other Confucian countries at different levels of economic development – China, South Korea and Taiwan. Even more curiously, China emphasizes Secular-Rational values more than much wealthier South Korea and Taiwan and Self-expression more than Taiwan. Economic development, therefore, doesn't seem to explain any of the whiting cluster variation in cultural values. Another peculiarity is that all these Confucian countries with very heterogeneous level of economic development are much less traditional than all highly developed English-speaking countries such as USA, Great Britain and Australia. Turning to Schwartz' cultural map, the evidence is again not at all conclusive. Japan can be found within close proximity of other wealthy countries, this time, however, English-speaking such as

USA, Canada (English part) and Australia but it is far distant from the Catholic and Protestant Western European countries. What is even more peculiar, is that *"Japan presents a striking exception"* with regard to the structure of the value orientations (Schwartz, 2006, p. 155). The Japanese society places high importance on Hierarchy and Harmony but it doesn't embrace Embeddedness which is supposedly correlated with the previous two and it also shares the values of Intellectual Autonomy but not the values of Egalitarianism which are intercorrelated in all other societies. These peculiarities make Schwartz to conclude that the position of Japan on the map is *"necessarily misleading"*. It is then relevant to assess the location of the other highly developed East Asian economies such as Hong Kong and South Korea. They are again firmly within the cluster of Confucian societies some of which with low income per capita such as Thailand and China and, what is even more interesting, they seem to be culturally similar to other very low income societies such as India, Ukraine and even Zimbabwe.

Following this discussion, it could be extrapolated that the nature of the relationship between economic development and values might be of spurious nature, that is, both are caused by other factors such as belonging to a certain civilization. It is relatively well-established scientific argument originating from Weber (1958) that religion has an impact on economic development, and it is also one of the main bases for civilizational formation. Weber specifically outlines the values such as work ethic and parsimony which originate in Protestantism and differing from the Catholicism as causes of the emergence of capitalism. Protestants, and more specifically Calvinists, perceived worldly success as a sign of a predestination which provided them with strong incentives to achieve more material success compared to followers of other religions. The Weberian thesis has been criticized for lack of empirical support but more recent studies conclusively fill this gap. Barro and McCleary (2003), for instance, provide evidence that certain religious characteristics such as believe in hell and heaven influence positively economic growth while religious practices (e.g. church attendance) hinder economic performance. The reason behind it is that religion affects personal traits such as *"honesty, work ethic, thrift, and openness to strangers"* (p. 771). According to their statistical analysis which deals with the potential problem of endogeneity by utilizing an instrumental variable technique, a decline in the levels of church attendances results in economic growth – a finding which is in sharp contrast to the secularization theory postulates. Furthermore, they find significant differences between the share of Protestant, Orthodox, Muslim and other religious denominations in a nation compared to Catholics and

various measures of economic performance. Landes (1998), examining the factors influencing the economic wealth of nations, also gives support to the Weber's thesis by arguing that Protestants were better fit for economic success. The two main reasons outlined was the higher literacy rate among Protestants who were supposed to personally read the religious texts and the higher importance which was attributed to time and punctuality. In a historical analysis covering the period from 1500 to 1750, Blum and Dudley (2001) also attribute the accelerated economic performance of the European North to the Protestant religion. It has been emphasized that Protestantism on a societal level contributes to the economic growth by strengthening contractual relationships between individuals. This, according to the authors, is a result of increased personal responsibility for ones behaviour in contrast to Catholics where bad deeds (such as dissolving a contract) can be pardoned through the sacrament of penance. Another study (Hayward & Kemmelmeier, 2011) points out that Protestantism on individual as well as on country level is associated with more pro-capitalist values such as private ownership, individual responsibility, competition and hard work compared to Catholics and these differences are even more pronounced in comparison to Orthodox and Muslim.

The problem of the possibility of a reverse causality is one of the main critics against the theory of Inglehart in Haller's (2002) journal article. The author refers to a so called 'new theory of economic growth' which focuses on culture as a force which drives economic success on a national level (Romer, 1986; Lucas, 1988; Jones, 1995). Considering such interpretation, it is viable to assume that certain cultural characteristics of the Western countries which could be rooted back to their religion, could explain their economic success and not that their economic development has altered their culture.

Communist ideology is also self-evidently related to the level of economic development. Communist economies were outperformed by their Western European counterparts during the Cold War which led to the discredit of the planned economy as an alternative to the free market economy. Additionally, all ex-communist countries experienced a substantial economic crackdown during the 1990s which further increased the differences between Western countries and ex-communist ones. Thus, as it was already proposed, communism is associated with certain cultural values and at the same time it is a cause of a divergent level of economic development.

The theoretical considerations and empirical evidence outlined above lead to the formulation of a third hypothesis which opposes the second one. It will be hypothesized that the nature of the relationship between economic development and values is of a spurious nature. That is,

economic development and cultural values in Europe are both caused by religion and experiencing communism, among other cultural heritage factors, and therefore there is no independent effect of economic development on culture (Hypothesis 3).

These three hypotheses will be tested with a variety of statistical methods in the following empirical part of the thesis.

Research design and methods

Units of analysis

Before proceeding to the description of the dataset and the operationalization of the main concepts, it is necessary to specify what the units of analysis are. As Schwartz notices, "*almost all large, cross-cultural studies treat countries as their cultural unit*" (2006, p. 153) and he also concludes that countries are meaningful units of analysis, despite that they are apparently not always homogeneous (see also Minkov & Hofstede, 2012). The reason behind is that the dominant national culture is transmitted to the whole population through the national institutions and the mass media (Inglehart & Baker, 2000). Additional argument is that the aggregate level data correct for a random measurement error on individual level (Welzel et al., 2003). Therefore, despite of the heterogeneity on individual level, there are specific national characteristics which can be meaningfully analysed.

Data

The choice of dataset for testing empirically the hypotheses outlined above is the European Social Survey (ESS). It is a representative cross-national survey which measures values, attitudes and behaviour patterns of the populations in more than 30 European countries at 6 time points with a gap of about 1 year between each round. There are three main reasons for this choice: first, the section on human values was purposely designed to capture the Schwartz' value orientations[4], secondly, it includes most of the countries in Europe and last but not least it has collected data repeatedly at 6 different time points which allows for a

[4] See Shalom Schwartz, "A Proposal for Measuring Value Orientations across Nations"

longitudinal analysis of cultural values. ESS Round 4 from 2008[5] serves as a basic dataset for the multidimensional scaling analysis because it includes the highest number of European countries – 27. Data for Austria, Iceland and Luxembourg weren't collected in 2008 and therefore the dataset from 2004[6] was used instead for these countries as it was the closest year to the main dataset. For the same reason data on Lithuania were extracted from ESS Round 5 (2010)[7]. One of the questions was asked differently in the Bulgarian questionnaire and therefore it was unsuitable for a comparative analysis. Data for Bulgaria were used from the 2010 dataset instead. A time span of 6 years should not result in any problems of reliability of the data as the cultural value orientations are considerably stable over time (Schwartz, Bardi & Bianchi 2000). The combined dataset, including 32 European countries, lacks information only about Italy, Belorussia, Moldova, the West Balkan countries and the mini-states in Europe. Even though the above mentioned countries would be also of interest for this analysis, the dataset, nevertheless, comprises of sufficient number of countries for this type of analysis. In the third part of the empirical analysis the 6 rounds of ESS survey were combined forming a longitudinal dataset with 130 time-country observations. This dataset is relatively balanced with an average of 4.2 time point observation per country.

Operationalization

Dependent variable

Cultural values. The key concept of interest in this analysis is culture or more precisely cultural values. As it was outlined in the introduction, different approaches are not just feasible but they could be also desirable as they may tap more specific elements of the concept. Schwartz' 7 cultural value orientations offer a number of advantages which justify their use as a feasible indicator of culture. Among the most important advantages is the empirically proven universalism of the values in all cultures, because equivalence of the questionnaire in all languages is often considered as one of the serious problems in cross-national analysis (Leuze, 2012). Another reason is the inclusion of Schwartz typology of cultural values in a large dataset such as ESS.

[5] ESS Round 4: European Social Survey Round 4 Data (2008). Data file edition 4.1. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.
[6] ESS Round 2: European Social Survey Round 2 Data (2004). Data file edition 3.3. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.
[7] ESS Round 5: European Social Survey Round 5 Data (2010). Data file edition 3.0. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data.

The cultural values were operationalized as suggested in the work from Schwartz (2006). There are 21 questions in the original dataset about the value preferences of individuals. They consist of a description of a person and a question "*how much each person is or is not like you* (the respondent)" with an ordinal response scale which varies from 1 "*Very much like me*" to 6 "*Not like me at all*". Each of the 7 cultural value indexes consists of between 1 and 6 variables with an average of 3 per index. For the exact original variable names in the ESS, the respective cultural value orientation, the dimension as well as examples of such values, please see Table 1. Alternatively, the Multidimensional scaling analysis was run with the 10 human values as operationalized by Schwartz (1994) and with all 21 individual values separately and the results were strikingly similar which proves the robustness of the analysis.

In order to account for tendentious answering, the mean score on the 21 variables for each individual was calculated and the value score was measured as the difference from the mean of all 21 questions. The 7 values are calculated as the sum of the respective individual values divided by their number. The values were aggregated by calculating the mean score for each country and design weights were applied[8] when aggregating. The final cultural values, consequently, can be positive or negative depending on their deviation from the mean on all cultural values. When performing the MDS analysis each value orientation was given equal weight by centring them to mean of 0 and a standard deviation of 1. The 3 cultural value dimensions, which were used in the longitudinal analysis, were respectively calculated by subtracting one end of the dimension by its opposite. The "Autonomy/Embeddedness" dimension varies from -1.17 to 1.014, the "Egalitarianism/Hierarchy" – form .455 to 2.26 and the "Harmony/Mastery" – from .70 to 1.98.

[8] As recommended in the website of ESS, available at: http://essedunet.nsd.uib.no/cms/topics/weight/

Table 1. Variable names, respective values, dimensions and examples

Variable in ESS	Cultural value orientation	Examples of important values	Cultural value dimension
Important to think new ideas and being creative	Intellectual Autonomy	Broad-mindedness, Curiosity, Creativity	Autonomy – Embedded-ness
Important to understand different people			
Important to make own decisions and be free			
Important to try new and different things in life	Affectual Autonomy	Pleasure, Exciting life, Varied life	
Important to have a good time			
Important to seek fun and things that give pleasure			
Important to live in secure and safe surroundings	Embeddedness	Social order, Respect for tradition, Security, Obedience, Wisdom	
Important to do what is told and follow rules			
Important to be humble and modest, not draw attention			
Important that government is strong and ensures safety			
Important to behave properly			
Important to follow traditions and customs			
Important that people are treated equally and have equal opportunities	Egalitarianism	Equality, Social justice, Responsibility, Help, Honesty	Egalitarianism - Hierarchy
Important to help people and care for others well-being			
Important to be loyal to friends and devote to people close			
Important to be rich, have money and expensive things	Hierarchy	Social power, Authority, Humility, Wealth	
Important to get respect from others			
Important to show abilities and be admired	Mastery	Ambition, Success, Daring Competence	Mastery – Harmony
Important to be successful and that people recognise achievements			
Important to seek adventures and have an exciting life			
Important to care for nature and environment	Harmony	World at peace, Unity with nature, Protecting the environment	

Independent variables

Religion. Even though very few countries are relatively homogenous with regard to religion, in most countries there is clearly a historically predominant religious denomination. This religion may have lost its vitality at present or it might have been surpassed as a share of adherents by another religious denomination because of migration or differences in fertility rates. Nevertheless, the historically predominant religion has already shaped the national cultures and the respective religion's values are at present still being transmitted through the national institutions (Inglehart & Baker, 2000). Countries are conventionally defined by their predominant religion consistently in a number of analyses and most importantly in Inglehart's research (Inglehart & Baker, 2000; Norris & Inglehart, 2002). For a full classification of the countries, see appendix.

Language similarity. As a proxy of language similarity the European languages are grouped into the following categories: Romance, Germanic, Slavic, Uralic and Baltic plus Greek and Turkish languages which are individual in Europe. Strictly linguistically speaking, all official European languages (represented in this dataset), fall into the category of Indo-European language family, with the exception of the Uralic and Turkic (Lewis, Simons, & Fennig, 2014). They can be, however, further divided into sub-families which are of higher relevance for this research. Finish, Estonian and Hungarian are grouped as Uralic languages despite that the first two are part of a Finnic sub-family while Hungarian is an individual Uralic language. The Turkish language as a singleton is part of the Altaic language family and more specifically the Turkic sub-family and it is consequently defined as such. Romance languages are more precisely part of an Italic sub-family but the only other language in this sub-family is Latin which is considered a dead language. The name Romance is, therefore, preferred as it is more commonly used. The language sub-families can be even further and further subdivided. Bulgarian language, for instance, is an Eastern subdivision of a South Slavic subdivision within the Slavic sub-family of the Indo-European languages. Consequently, European languages can be characterized with a different level of similarity to one another. The language sub-families chosen here present only an approximation of a language similarity at a level which is consistent with the proposed hypothesis 1B. Further subdivision of the language sub-families, however, would unnecessarily complicate the empirical analysis while combining most European countries into an Indo-European family would be meaningless bearing in mind the considerable dissimilarities within this family group. Another problem requiring attention is that obviously there are significant language

minorities within Europe. Therefore, a compromise had to be made and define each country as having only one predominant language based on the majority of the speakers. In most cases there is a single official language which is spoken by the greatest majority of the citizens. More problematic are bilingual or trilingual countries such as Belgium which was classified as a Germanic speaking country because approximately 57% speak Dutch (a Germanic language) compared to 38% French speakers (a Romance language)[9]. Luxembourg also represent a specific case as it has 3 official languages each spoken by a great deal of the population. Two of them, however, namely German and Luxemburgish are Germanic languages which tips the balance to choosing it as a predominant one.

Communism. A single dummy variable makes the distinction between countries which experienced a communist rule in the previous century from those which didn't. This way of operationalization is also somewhat arguable. Communism has penetrated the Central and Eastern European countries to a different degree for the following reasons. First of all, the duration of communist rule is nearly 30 years longer for the territories of the former Russian Empire such as modern Russia and most of modern Ukraine and therefore the effect there is supposedly the acutest. The territories annexed by the Soviet Union during and after the IIWW were also exposed to a strong influence. To a slightly lesser extend are affected Central and Eastern European countries which turned to communism after the war. Among them in Bulgaria and Romania communism was accepted by the population without strong opposition while the ideology was rejected by the other Central and Eastern European countries (Schwartz & Bardi, 1997). Additionally, the communist ideology was installed in Yugoslavia, however, this country was not part of the economic and political organizations which were binding the other communist countries together and the influence from USSR was more limited. Consequently, choosing a single dummy variable for ex-communist countries doesn't take into account many peculiarities, however, it is preferred due to its simplicity. Creating a categorical variable which captures these variations would not be reasonable in a statistical model with a small number of cases.

Economic development. Finally, GDP per capita was utilized as a measure of level of economic development. The choice can be justified by the frequency of use in previous studies and most importantly in the previous research on this topic described in the literature review (Inglehart & Baker, 2000, Schwartz, 2006). Another good reason for this choice is

[9] Data from ESS 2008

that there is a significant variation in this indicator within the period covered by the data which allows analysis of change over time. Inglehart and Baker also use share of the labour force in the industry and service sector, however, there is negligible change within this variable in the analysed period which makes it unsuitable for longitudinal analysis. Vanhanen's "index of power resources" has been argued to be the best indicator to test the modernization theory hypothesis as it captures not only economic but also social and intellectual resources which are important with regard to modernization theory (Welzel et al., 2003). These data are unfortunately not available for the period analysed here. Therefore, we should be aware that GDP per capita, despite of being widely used in this type of research, does not provide the full information on the resources available to individuals which supposedly alter their values.

Additionally, in the longitudinal analysis it was considered whether to include dummy variables for each round of ESS which are able to capture any temporal development in value changes which is not a result of economic development. This could include the pressures of globalization, the global financial crisis or any other factors which affect equally all European countries at certain time point. Each model in part III was run using these dummy variables but they were included in the presented models only if the test for temporal effects was statistically significant because otherwise they are an unnecessary burden for the model.

Methods

The empirical analysis is performed in three main parts in each of which different statistical techniques are utilized. The first part uses multidimensional scaling (MDS) which provides us with an opportunity to visually asses the cultural differences and similarities between all European countries in the dataset. It can also facilitate in identifying patterns of clustering and getting more insights into the nature of the relationship between each explanatory factor and cultural (dis)similarities. Part II of the empirical analysis aims at comparing the statistical power of each of the factors on overall cultural (dis)similarities. An index of cultural (dis)similarity is computed with the use of MDS estimated in only one dimension. The impact of each of the factors will be assessed in a separate Ordinary Least Squares (OLS) linear regressions model and finally their unique effect will be identified by combining them in one multiple regression analysis. Two techniques will be used in the last part of the empirical analysis. Pooled OLS model will utilize data on the same number of countries but

measured at more than one time point which increases the statistical precision of the model. This allows the estimation of the effect of the same cultural heritage and economic development factors on specific cultural value dimensions. The final fixed-effects model is able to assess the impact of economic development on values over the analysed period when all other characteristics of the countries are held constant. The statistical package used in all analyses is STATA, version 11.

Multidimensional scaling (MDS) is especially useful for answering the posed research question because we will be able to measure and assess approximately how close or distant European countries are with regard to all 7 cultural value orientations taken simultaneously. The same technique is used by Schwartz (2006) while Inglehart and Baker (2000) also plot the countries on a world cultural map and draw lines between clusters but the presence of only two cultural dimensions in their analysis doesn't require more complex modelling. MDS also offers advantages compared to cluster analysis technique because it allows taking into account some underlying factors (e.g. theory) when identifying clusters. MDS is a statistical technique which presents visually how similar or dissimilar objects are with regard to a chosen number of properties we wish to compare them to. In the case of the two-dimensional solution (which is usually preferred) the units of analysis (i.e. countries) are presented as dots on the plot. The distance between the dots has no substantial meaning but it provides us the opportunity to compare distances between dots and draw conclusions about the level of (dis)similarities between countries. We can make sense of the data by using different modes of interpretation, also known as 'partitioning' of the data, some of the most popular of which are the axial, modular and polar modes (Borg, Groenen, & Mair, 2013). Additionally, vectors can be drawn on the plot in order to better understand the configuration of the countries. The vectors are derived by performing regression analysis with the coordinates of the countries on the x- and y-axes as independent variables and each value orientation as a dependent variable in separate regression analyses. The countries which are located closer to the arrow of this 'best fitting line' score high on this particular variable. The exact position of the country with regard to this value can be found by drawing a perpendicular line from the dot of the country to the vector. The correlation coefficient (r) of the vector demonstrates how well it fits into the configuration of countries.

The indexes of (dis)similarity, also known as proximities, in this analysis are indirectly derived from pairs of data vectors. In my model I use ordinal (non-metric) MDS method with continuous (L2 or Eucliddean) measures of (dis)similarity as these are described in the

literature as the most commonly used method and measure (Borg et al., 2013, pp. 37-39). For the purpose of testing the robustness of the results, I run classical and modern methods and specified different measures of (dis)similarity and they all triggered very similar results. The starting configuration of the model is a 'classical solution' as it results in a more accurate solution (lower Stress level) but a random starting configuration with 1000 seeds does not produce substantially different results. In Part I of the empirical analysis I use two-dimensional approximating configuration because it offers a solution which fits the data well enough and in this case it is preferred over the more-dimensional solutions for its substantially easier way of interpretation. The stress-1 value is used as an indicator of how well the MDS-solution represents the real differences and similarities between the objects. The stress-1 varies from 0 to 1 with lower values indicating better fit of the model. The value of the Stress depends on many factors among which are the number of dimensions, the number of cases, the quality of the data and the presence of outliers (pp. 23-25). The Stress value of my main two-dimensional MDS configuration is 0.088 which means that it doesn't represent the real proximities in a perfect manner but it is at a very acceptable quality. As a good solution can be accepted any result which is at least 2 standard deviations lower than a random solution. A random solution with 32 cases and two dimensions has a Stress level of approximately 0.34 and a standard deviation of 0.04 (see Borg et al., p. 24, fig. 3.2 and fig. 3.3) and therefore a solution with a stress bellow 0.26, as it is in my case, provides a satisfactory goodness of fit of the model.

As it was already mentioned, there are different ways of regionalization (partitioning) of the data. The three basic criteria for regionalization are that (1) the countries within the regions are closely located, (2) the regions do not overlap and (3) they cover the whole plot space (p. 71). Borg et al. recommend using as simple solutions for regionalization as possible, preferably by drawing straight lines and depicting regions which consist of some outliers rather than drawing more complex regions (p. 73). In this analysis I prefer to use a theory-driven mode of regionalization of data even if this results in slightly more complex configurations. The reason for this is to demonstrate how easily we can explain groupings of countries with regard to certain factors of interest. These groupings could be found in various places on the plot and therefore a more flexible mode of regionalization is required. If we are able to regionalize the data with the use of relatively few curves of the lines, that means that this particular variable is able to explain the constellation of the countries better than another variable which requires more curves and where outliers are present.

In the second part of the analysis I use a one-dimensional solution for the reason that the position of the countries on a one-dimensional plot can be used as a dependent variable in a regression analysis. This provides me with the opportunity to use different factors as explanatory variables of cultural (dis)similarity and in this way to assess their relevance and compare their strength. A one-dimensional solution is, of course, at the expense of a loss of precision as the Stress value is always higher than in the more-dimensional solutions. In my case the Stress is 0.198 which is more than double the Stress of the two-dimensional solution but, nevertheless, it is far lower than 2 standard deviations from a random solution which is 0.36 (calculated as 0.5-(2x0.07)). Additionally, regression analyses are performed with the use of each cultural value in order to give a more substantial meaning to the plot. By using this index, which can be characterized with a certain degree of abstraction, we are able to answer the question whether European cultures overall are different and similar because of the level of economic development or because of their cultural heritage. The so constructed index of cultural (dis)similarity, therefore, trades some precision for a great advantage of simplicity and parsimony. Alternative strategy would be to do regression analyses on each value orientation (or value dimension) separately but in this way at the end it would be much more complex to summarize and draw conclusions from 7 (or 3) separate regressions.

The OLS regression analysis is conventionally used in empirical research due to its ability to assess, compare and formally test the relationship between factors and outcomes. Among the most important estimations is the regression coefficient which indicates by how much the dependent (outcome) variable changes with an increase of one unit in the independent (predicting) variable (Schroeder, Sjoquest, & Stephan, 1986, p. 28). It can have positive or negative values implying respectively positive or negative correlation between the two variables. As different variables are measured on a different scale (e.g. GDP per capita in dollars; religion in categories), sometimes a standardized regression coefficients are preferred as they allow direct comparison between the effects of all variables. It indicates the change in the dependent variable by an increase of one standard deviation from the mean in the independent variable (p. 32). The standard error of the model includes all random deviations which are not captured by the explanatory variable(s). The test of statistical significance indicates the level of certainty with which one can accept that the two variables are in reality positively or negatively correlated (p. 39). Most researchers accept coefficients which significantly differ from zero with probability of 95% (that is, statistical significance is at the 0.05 level). The level of significance, however, is affected by the sample size (smaller

number of cases results in higher standard errors) and therefore one needs to interpret it with a caution in statistical models with aggregate level data. The coefficient of determination (r^2) is also important in the interpretation of the results. It gives information about how well the independent variable is able to explain the variation in the dependent variable. It varies from 0 (no any variation explained) to 1 (all the variation explained). Therefore, the interpretation of the regression coefficients needs to be combined with the interpretation of the coefficient of determination. It is important to note that statistically significant regression coefficient doesn't prove a causal relationship between the two variables. In most cases there are other (third) variables which are correlated to the predictor and outcome variables. By including these other variables in a multiple OLS regression, we adjust (control) for their effect. This way the coefficients as well as the statistical significance are very likely to change because two or more of the independent variables might explain the same part of the variance in the outcome variable. Changes in the coefficient of multiple determination (R^2), which in a multiple regression presents the amount of variation all variables included in the model explain, is also of interest.

The three crucial criteria for drawing causal inference in cross-sectional analysis is that (1) the two variables are correlated, (2) there is a theoretical justification of this relationship and (3) the relationship is not spurious, that is, not caused by a third factor (Dietz & Kalof, 2009, p. 187). The third criterion, known as potential omitted variable bias, is of a particular interest in this empirical research. As it was already outlined in the theoretical framework there are reasons to assume that economic development as well as cultural values are determined by a 'third variable', namely religion and communism among other cultural heritage factors. Therefore, it is sensible to estimate the effect of economic development and each of the other factors first independently and then combined in a multiple regression analysis.

As it was explained, in part II the effect of the hypothesized variables is tested and compared as to their relevance in explaining overall cultural (dis)similarities in Europe which is the main interest in this Master thesis. However, according to modernization theory economic development is associated more strongly with certain cultural values, namely Autonomy/Embeddedness and Egalitarianism/Hierarchy, while it is weakly or not related to Mastery/Harmony dimension. Therefore, in order to be more conclusive in the findings it is necessary to assess the relevance of the factors with regard to each of the cultural value dimensions. This is done in part III with the use of pooled OLS and fixed-effects models for analysing longitudinal data. The pooled OLS model, also known as the total estimator,

presents results which we would roughly get from a cross-sectional analysis (Peterson, 2004), despite that it uses longitudinal data. Therefore, it doesn't offer any advantages compared to the cross-sectional analysis except that it improves the precision of the model by increasing the sample size from 31 to 130. Instead of analysing each value orientation separately, for parsimony reasons in this part the dependent variables are the 3 value dimensions. By default the model considers observations from one country at different time points as independent observations and therefore robust standard errors were computed to account for the grouped nature of the data.

Finally a fixed-effects (FE) model is offered as a methodological improvement to the conventionally used cross-sectional methods. The greatest advantage of this estimator is that it successfully deals with the problem of omitted variable bias (Peterson, 2004; Alison, 2009) which is considered a serious limitation in cross-sectional research. In the cross-sectional analysis performed here we are able to control for the effect of a limited number of factors, namely religion and communism. In the theoretical framework, however, it was concluded that these two factors certainly do not capture the whole array of possible cultural heritage and geo-ecological factors which could influence cultural values and economic development and therefore results from a cross-sectional analysis are inevitably biased. The FE method takes into account only the within-country change in the outcome and explanatory variables; consequently, it holds all time-invariable country-specific characteristics constant. Since most of the cultural heritage factors are considerably stable over time, they can no longer bias the estimation of the variable of interest. Thus, in the FE we are able to estimate the independent effect of economic development on cultural values. The FE, however, answers a slightly different question than the cross-sectional analysis, namely how a change in the independent variable over time is associated with a change in the dependent variable during the same period. Another important advantage of this model is that many of the comparison biases such as construct bias, method bias and item bias (Vijver & Fons, 2003, pp. 145-148) become irrelevant. Problems like sample incomparability, differential social desirability across cultures, language and equivalence of the construct measures are more or less fixed in each country and therefore they no longer endanger the validity of the results.

Along with the advantages, however, there are also certain limitations of this technique. Most significantly, it is arguable whether we can observe a significant value change within the analysed period of 12 years. From the perspective of the Clash of civilizations thesis, this period is of negligible importance for the formation of values. This model, however, aims at

testing the modernization theory postulate that economic development brings change in cultural values and as long as there is economic growth there must be respective adjustment of the values. During the observed period there is a tremendous fluctuation in the level of economic output in both directions but primarily upwards (see graphs in the appendix). The cultural values also exhibit change over this time period even though this variation is less pronounced compared to this between countries. A study by Davidov (2010) specifically aims at testing whether a temporal analysis is possible using ESS and Schwartz' 10 human values. Despite that he analyses only a much shorter period of 5 years, Davidov concludes that *"temporal scalar invariance is evidenced within countries and over time thus allowing longitudinal value change to be studied in all the participating countries"* (p. 171). Descriptive statistics of the current dataset presented in the appendix indicates significant change both in GDP per capita and each of the three cultural value dimensions. Thus, even though values are considered to be formed in the early years of socialization and remain stable during the adulthood, some change is evident and we should be able to explain it. Inglehart and Baker (2000) also attempt to analyse a temporal value change over a period of 5 to 17 years using several waves of WVS and they argue that most countries move in a direction of embracing Secular-Rational and Self-expression values because of the economic development while the ex-communist countries have moved in the opposite direction due to the economic hurdles in the years following the democratic changes.

Another disadvantage of the model is that it ignores data which don't change over time or it is measured at only one time point. In the FE model, however, we analyse continuous variables which always differ over time therefore this problem is not present. The second problem is also not that severe as the countries observed at only one ESS round are only 4, namely Latvia, Lithuania, Luxembourg and Romania.

An important note that needs to be made is that, despite of its obvious advantages, the FE method doesn't automatically rules out the possibility of a reverse causation. It only indicates how values change when the GDP per capita changes but the same relation holds the other way around. The FE model, however, allows for the inclusion of time-lagged independent variables which can help establish a time sequence of the events. A time lag of GDP per capita can demonstrate how previous level of economic development results in change of cultural values in the following ESS round (i.e. approximately two years later), while by using a second lag the effect is estimated with approximately 4 years delay. This doesn't only address the problem of reverse causality but it also explores the possibility that the cultural

values change slowly and with some delay. A drawback to this approach, even though not too severe, is that it reduces the sample size as it doesn't take into account data on the dependent variable from the ESS rounds about which there is no respective lagged data on the independent variable. A more complex dynamic panel model allows for the inclusion of lagged dependent variables which controls for a possible self-reinforcing effect of cultural values from previous time points. This model, however, requires the use of instrumental variables as the lagged dependent variable is correlated with the current error terms. Due to its complexity and a serious risk of misspecification, this model is not used in the current analysis.

To summarize, MDS has a rather explorative purpose. It can answer the questions: what are the patterns of cultural (dis)similarities in Europe; can we identify any cultural clusters as defined by Huntington; which of the proposed factors are relevant in explaining cultural differences and do they overlap? Part II has the purpose of answering the rather abstract question whether economic development or cultural heritage factors can better explain why European cultures are overall different. The third part builds on the previous by explaining how cultural heritage factors and economic development are related to specific cultural values. Finally, in the fixed-effects model we can conclusively estimate how economic development affects cultural values while controlling for all time-constant country-specific characteristics.

Empirical findings

Part I: Mapping European cultures

Before we proceed to the MDS analysis it is useful to present some descriptive statistics. Table 2 display the average scores on each of the 7 value orientations for each of the 32 countries in the dataset and they can be used to assess the accuracy of the MDS solution. The table demonstrates that there are cultural differences but there is also consent on many of the cultural values across Europe. Most of the European countries, for instance, largely embrace Intellectual Autonomy, Harmony and Egalitarianism, while rejecting Hierarchy, Mastery and Affectual Autonomy and accepting Embeddedness only very moderately. The vectors on the plot and respectively the actual differences between countries, therefore, represent only different levels of acceptance or rejection of the cultural value orientations rather than completely opposite positions on the cultural dimensions. Despite of these similar patterns,

there is sufficient amount of variation which allows the analysis of its causes. What's more, their cumulative differences are of greater importance.

Table 2. Average score on the 7 value orientations for each country in the dataset

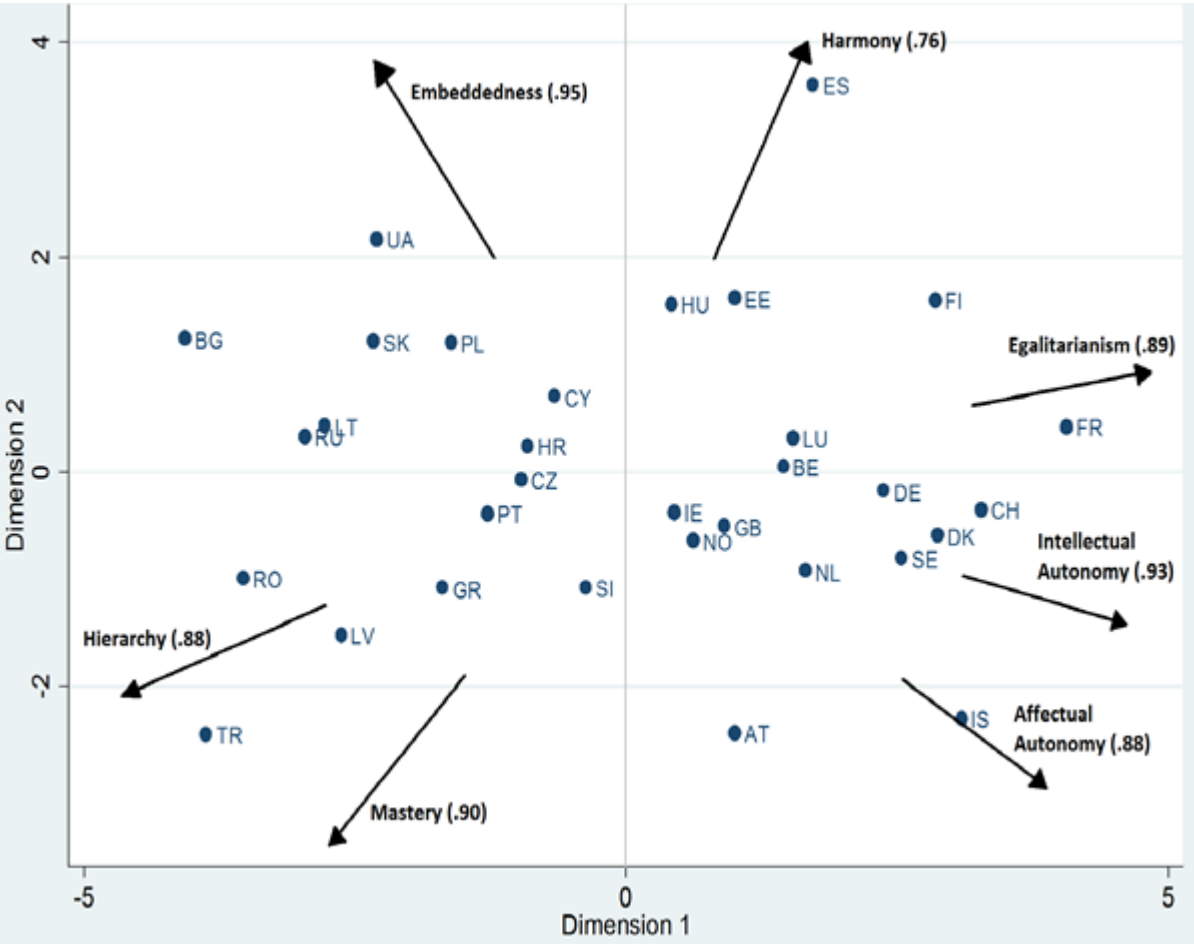
Abbr.	Country name	Intelle-ctual auto-nomy	Hierar-chy	Egalitari-anism	Mastery	Embedd-edness	Affectual autonomy	Harmony
AT	Austria	.43	-.65	.66	-.40	-.22	.02	.49
BE	Belgium	.30	-.95	.73	-.66	.03	-.001	.65
BG	Bulgaria	-.15	-.75	.52	-.24	.37	-.59	.61
CH	Switzerland	.60	-.91	.80	-.72	-.17	-.01	.80
CY	Cyprus	.27	-.83	.59	-.68	-.3	.39	.47
CZ	Czech Rep.	.31	-.45	.44	-.69	.17	-.27	.52
DE	Germany	.59	-.95	.80	-.73	-.06	-.13	.68
DK	Denmark	.54	-.94	.84	-.67	-.16	.00	.73
EE	Estonia	.37	-.98	.57	-.64	.17	-.26	.87
ES	Spain	.38	-1.10	.89	-1.1	.38	-.41	.64
FI	Finland	.49	-1.24	.84	-.82	.12	-.20	.88
FR	France	.46	-1.27	.94	-.89	-.06	.20	.73
GB	Gr. Britain	.47	-1.0	.75	-.57	.05	-.28	.50
GR	Greece	.19	-.38	.46	-.50	.10	-.25	.40
HR	Croatia	.25	-.67	.71	-.58	.20	-.49	.43
HU	Hungary	.18	-.79	.50	-.68	.14	-.03	.79
IS	Iceland	.58	-.92	.99	-.72	-.22	.07	.37
IE	Ireland	.46	-.99	.73	-.55	.13	-.38	.45
LV	Latvia	.16	-.28	.29	-.36	.10	-.25	.42
LT	Lithuania	.10	-.45	.39	-.37	.23	-.50	.70
LU	Luxembourg	.40	-1.11	.74	-.74	.11	-.08	.55
NL	Netherlands	.50	-.95	.67	-.59	-.07	-.01	.55
NO	Norway	.47	-.84	.78	-.57	.04	-.37	.48
PL	Poland	.24	-.60	.57	-.61	.32	-.65	.59
PT	Portugal	.23	-.68	.57	-.46	.18	-.40	.45
RO	Romania	.03	-.17	.28	-.37	.22	-.40	.42
RU	Russia	.12	-.21	.40	-.48	.26	-.61	.58
SE	Sweden	.49	-.92	.89	-.70	-.13	.00	.61
SI	Slovenia	.24	-.90	.47	-.44	.10	-.06	.56
SK	Slovakia	.17	-.45	.54	-.63	.37	-.69	.48
TR	Turkey	.08	.17	.23	-.29	.16	-.30	.19
UA	Ukraine	.17	-.27	.43	-.68	.30	-.63	.76

Source: ESS 2008 (2004 and 2010), computation mine.

Figure 2 presents the configuration of the countries on the two-dimensional plot using the MDS technique. The distance between the countries demonstrates how close or distant they are with regard to the 7 cultural value orientations taken simultaneously. The vectors drawn on the plot facilitate in making sense of the results. The direction of the vectors fits very well with the theorized circular structure of the values which can be combined into 3 larger cultural value dimensions. Vectors which are close to each other represent intercorrelated values and those that lead to opposite directions are negatively correlated to one another – they form two ends of the same value dimension. Countries like Denmark and Sweden, for example, have comparatively high average scores on both Intellectual and Affectual Autonomy as they are intercorrelated, however, they don't have high scores on Embeddedness as these values are not compatible with each other but form opposite ends of the same cultural dimension. The numbers in the brackets after the name of the value orientations are the correlation coefficients (r) which give information about the goodness of fit of the vectors. Most of the vectors have high r-values which proves that they fit well in the data. Harmony is the only one having comparatively low score (.76) which could be accounted to the use of only one variable in the calculation of this value orientation compared to an average of 3 for the other values. Using only one variable reduces the reliability of the indicator which in this case taps the underlying concept less precisely.

A first glance at the results on Figure 1 gives the impression that the countries can be divided into two approximately equal clusters. The greatest variation is within dimension 1. The countries left from the zero on this dimension are, with the exception of Portugal, only Central and Eastern European countries. They can be characterized as placing a comparatively higher importance on Mastery, Hierarchy and Embeddedness. The counties right from the zero are, with the exceptions of Estonia and Hungary, Western European countries and they on their hand emphasize the values of Harmony, Egalitarianism, Intellectual and Affectual Autonomy more acutely than the other countries.

Figure 2. MDS configuration, Europe, 7 value orientations

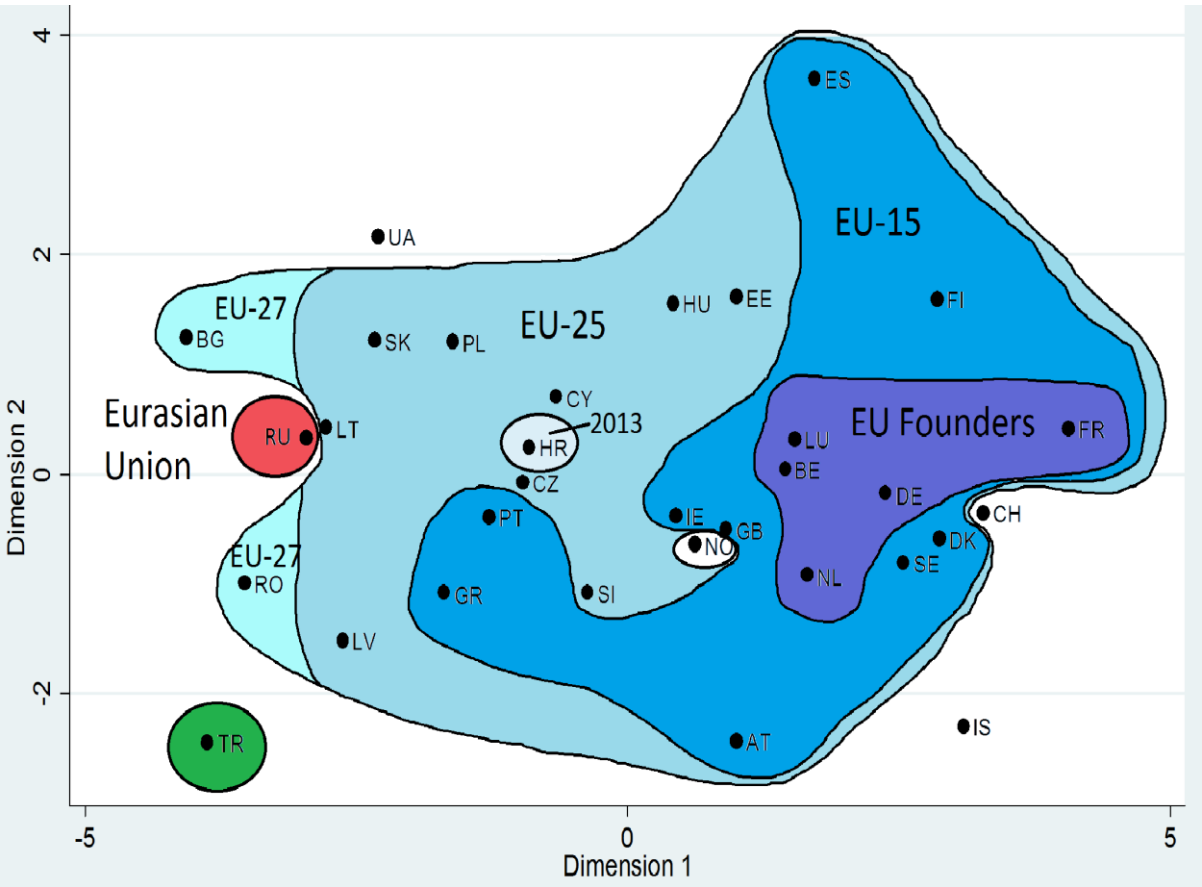


Source: ESS 2008 (2004 and 2010), computation mine. Stress value: 0.088.

Figure 3 contributes to solving the puzzle outlined in the introduction of this Master thesis with regard to the value consent of the European Union and the Eurasian Union. The countries founders of the EU and the core country and a single representative of the Eurasian Union, Russia, are located in exactly opposite corners on the plot, indicating large cultural value differences. With each consecutive enlargement, the EU stretches its cultural boundaries to include countries which are culturally much closer to Russia than to the initial founders of the union. With the expansion from 2007 with Bulgaria and Romania, the EU already encompasses countries which are culturally more distant to the core EU countries than it is even Russia itself. Geometrically, the distance between Bulgaria and the EU-founder countries is approximately equal to that from Turkey to the same countries. Consequently, cultural incompatibility is a disputable argument for denying a full membership of Turkey (and even to Russia!) as long as we can accept that Bulgaria and

Romania are successfully integrated in the EU. These results, however, suggest that this cultural distance is already quite significant.

Figure 3. European enlargement and the Eurasian Union

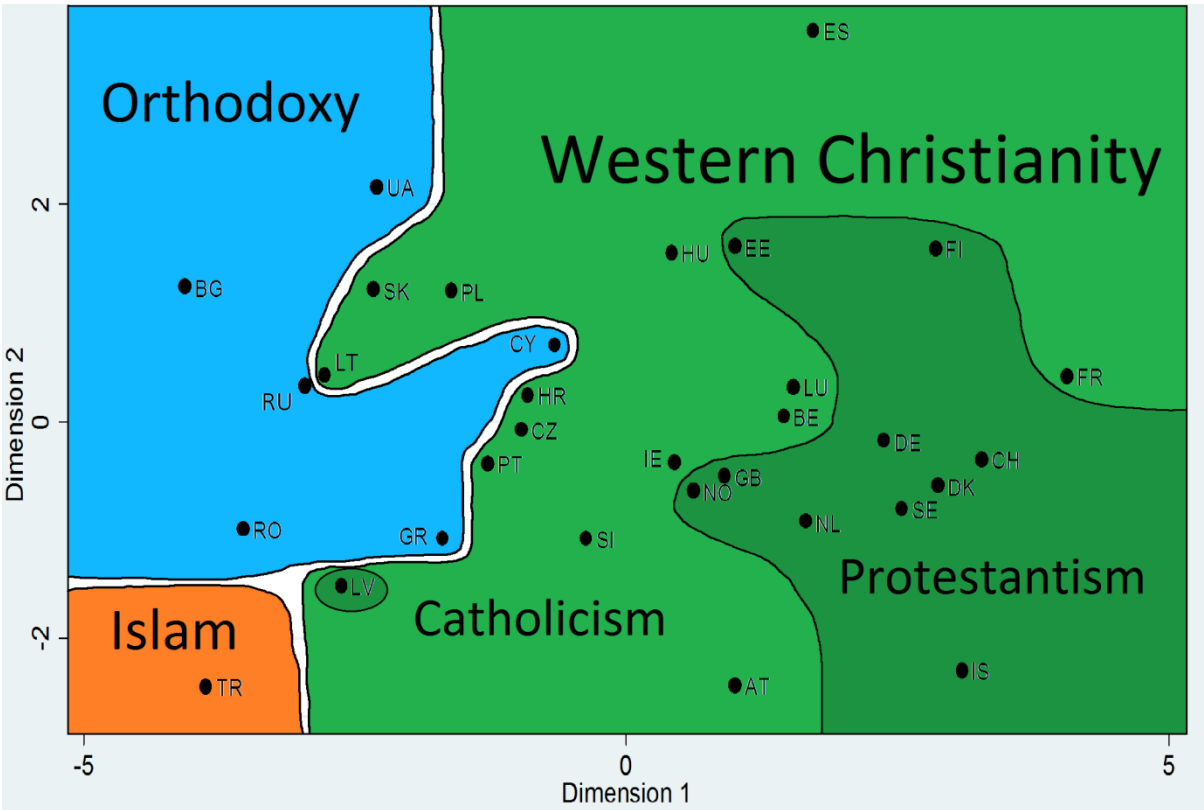


Source: ESS 2008 (2004 and 2010), computation and drawing mine. Stress value: 0.088.

The analysis continues with tests of the relevance of the hypothesized civilizational and modernizational factors with regard to the constellation of the countries on the same two-dimensional plot presented in Figure 2 and 3. In Figure 4 I use the classification of civilizations as outlined by Huntington, which overlaps with the main religious denominations in Europe. The regions on the plot could be separated with relatively few curves and outliers which implies that religion is a meaningful factor in explaining cultural (dis)similarities. The figure indicates that the representatives of the Slavic-Orthodox civilization encompass a common cultural space on the left corner of dimension 1 and around the centre of dimension 2. More significant outliers are Cyprus and Greece which are located slightly closer to the Western civilizations even though not too distant from the other Orthodox countries. Other factors such as economic development, colonial past as in the case of Cyprus and a long duration of EU membership as in the case of Greece may be helpful in

explaining the slight deviation of these two countries. The Western civilization, which comprises of Protestant and Catholic countries, on the other hand covers a large cultural area with all Protestant countries located on the right from the 0 on dimension 1 and the Catholic countries located around them or very close to the Orthodox cluster. The most apparent outliers are two of the Baltic countries as well as Slovakia and Poland. The inclusion of Lithuania and Latvia in the former USSR might be helpful in explaining their deviation, however, this explanation does not seem feasible when considering the location of the other Baltic country, Estonia. It could be argued that the Protestant religion of Estonia strongly influences its culture, while Catholicism has a less profound effect. Even though Latvia is defined as a historically Protestant, it represents a very special case. The Protestantism in Latvia does not constitute a majority of the population because the Catholicism and Orthodoxy are each followed by only a slightly smaller number of adherents - nearly a quarter of the population each. Turkey, as a single representative of the Islamic Civilization also seems to be located in its own cultural space in the lower left corner which demonstrates its uniqueness. As it can be noticed, Orthodox and Islamic countries are underrepresented in the dataset and for this reason the space they cover is more limited compared to the Western civilization. From the graphic it is apparent that the boundaries of the Western Christianity and the Orthodox world are rather blurry and by no means sharp. This observation supports entirely the statement of Huntington that "*while the lines are seldom sharp, they are real*" (Huntington 1993, p. 24). Despite of that, more clear distinction between the civilizations would be an even stronger support for his theory. Nevertheless, the important finding here is that the representatives of each civilization lie on distinct locations which provides us solid reasons to confirm the hypothesis 1A true. It is, however, apparent that religion cannot be thought of as a comprehensive predictor of cultural (dis)similarities in Europe.

Figure 4. Regionalization of the data: religion (civilization)

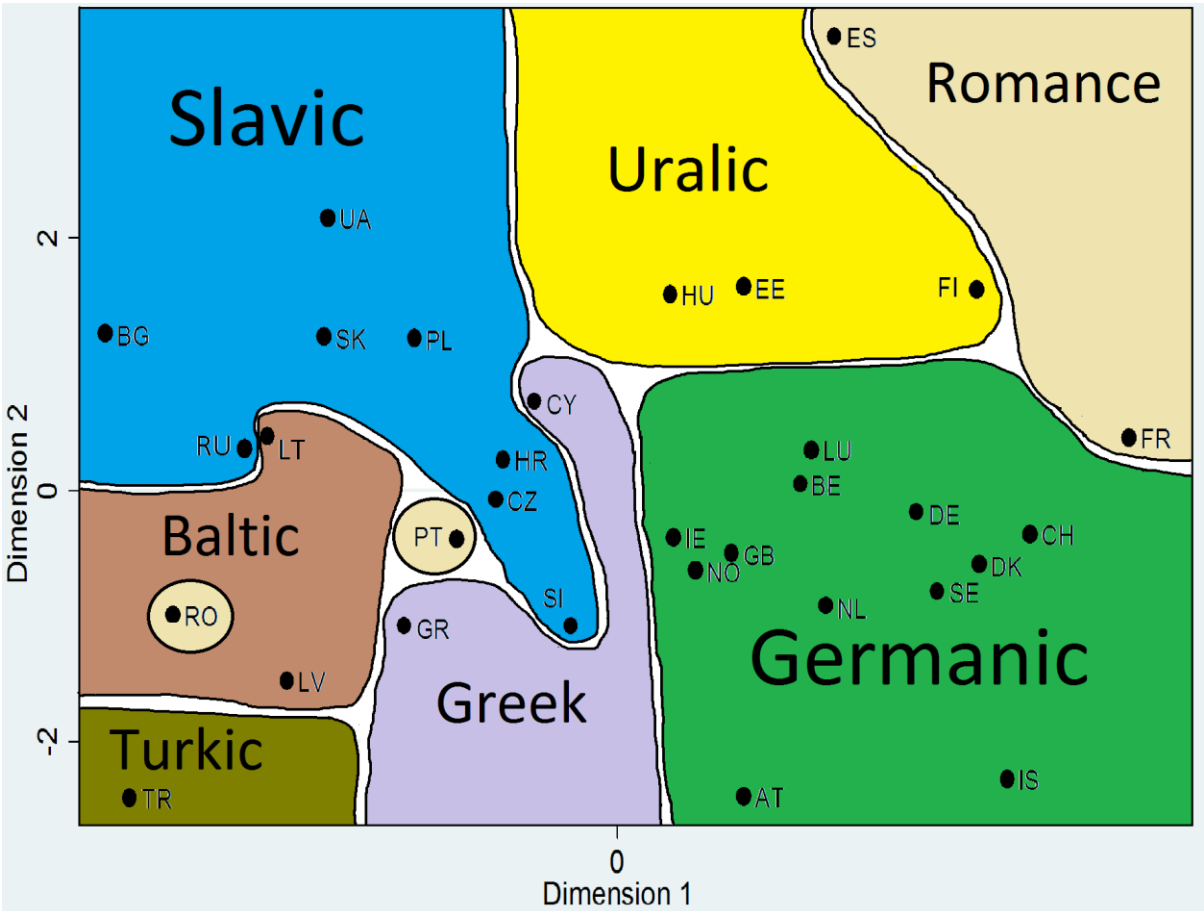


Source: ESS 2008 (2004 and 2010), computation and drawing mine. Stress value: 0.088.

Figure 5 demonstrates how well we are able to explain the constellation of the countries by using language families as an explanatory factor. Indeed, the countries where a language from the same language family is spoken are in general very closely located on the cultural map of Europe. Particularly Germanic language speakers are located on the right side of dimension 1 and in the middle and below the middle on dimension 2 which substantially means that they value highly Intellectual and Affectual Autonomy and Egalitarianism, while remaining undefined on the cultural dimension Mastery/Harmony. Uralic-speaking countries are also strikingly close culturally to each other despite of the geographical distance (between Hungary and the other two countries) and the differences in economic development and historical traditions. This is a particularly strong argument in favour of the relevance of language similarities in cultural distinction in Europe. Slavic-language speakers also appear closely located on the plot to one another with all countries on the left side on dimension 1. Some Central European Catholic Slavic-speaking countries are, however, closer to the Western European cluster compared to the Orthodox Slavic countries, Russia, Bulgaria and Ukraine, which is somewhat in line with Huntington's theory. The two Baltic-speaking countries and the two Greek-speaking countries are also located in approximately short

cultural distance to each other. The greatest outliers here are the Romance-speaking countries which are spread on a large cultural space. This could be partly due to underrepresentation of Romance-speaking countries in the analysis. If there were data on Italy and Andorra, for example, they would have most likely clustered together with Spain and France. The position of Romania could be easily explained with the use of all other factors by which it significantly differs compared to the rest of the Romance countries. Portugal, nevertheless, remains a striking outlier which speaks against the proposed hypothesis of diffusion of values based on similarities. The two most relevant factors by which Portugal differs compared to its supposed counterparts, Spain and France are the political-institutional traditions and the level of economic development. Despite of this obvious exception, language seems to group European cultures in an impressively consistent manner. Therefore, we can positively confirm hypothesis 1C that language is a very relevant factor in explaining cultural diversity in Europe.

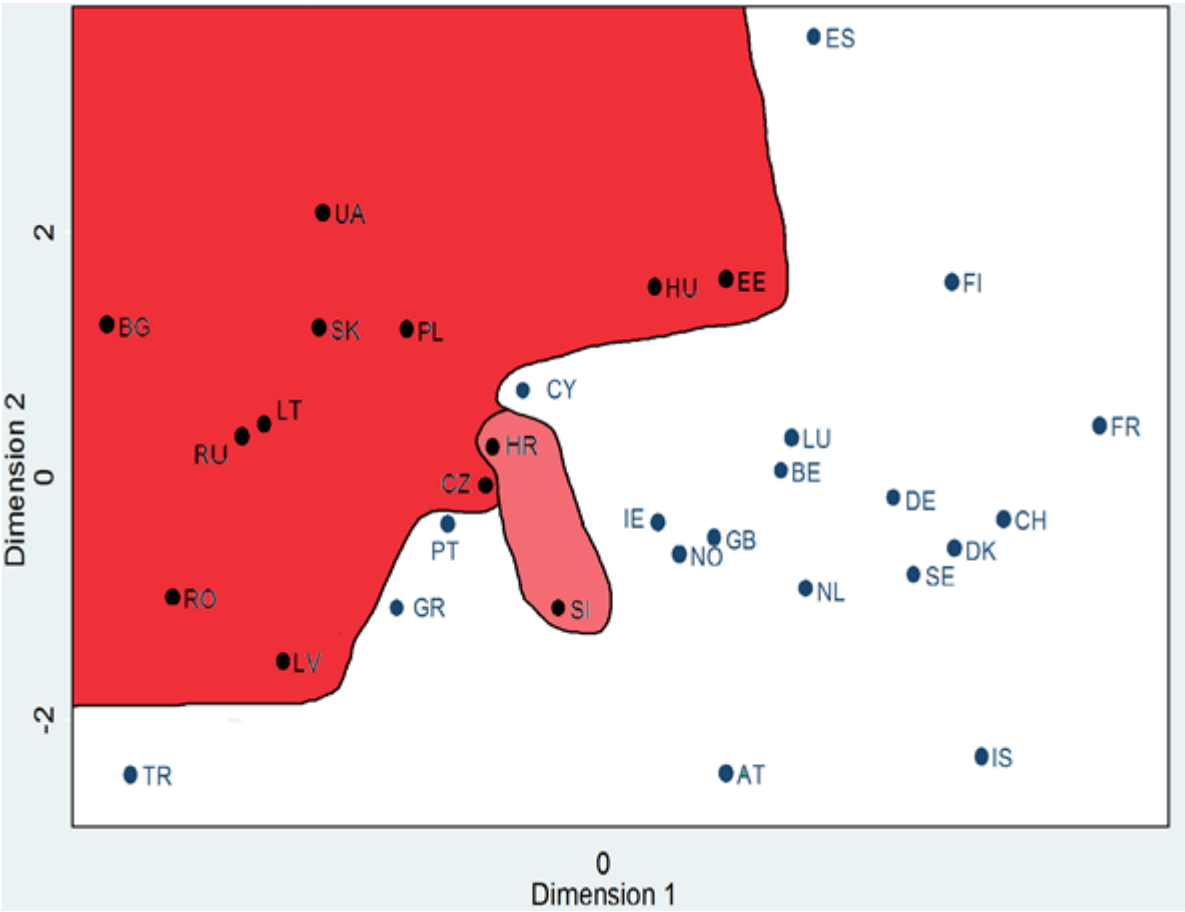
Figure 5. Regionalization of the data: language families



Source: ESS 2008 (2004 and 2010), computation and drawing mine. Stress value: 0.088.

The last of the civilizational factors is the history of experiencing communism whose effect is visually presented on Figure 6. The communist rule seems to have left a profound imprint on the Central and Eastern European societies as all of them appear to be covering a common cultural space on the left side of dimension 1 and the middle to top on dimension 2. Consistent with the findings of Schwartz and Bardi (1997), it seems that the distinguishing feature of the ex-communist societies is mainly the high level of Embeddedness, as well as above average levels of Hierarchy, while remaining rather heterogeneous on the Harmony/Mastery dimension. Slovenia appears to be the most significant outlier which, together with Croatia was part of Yugoslavia – a communist country not participating in the economic and military pacts led by the Soviet Union. This implies that the cultural influence from the Soviet Union and between the member states of the Warsaw Pact and COMMECON have more strongly impacted the values of the respective countries rather than the communism as an ideology and the adaptation to the life circumstances it has created. Hungary and Estonia also seem to deviate from the rest of the ex-communist countries. As it was already explained, language and kinship ties are the most reasonable source of this distinction. The position of the non-ex-communist countries reveals another interesting pattern. Countries with long democratic traditions are closely located to each other on the lower left corner of the plot exactly apposite to the ex-communist countries. Countries with shorter democratic traditions, however, such as Portugal, Spain, Turkey and Greece, are particularly deviating cases. This speaks nothing about the direction of causation though as we cannot be sure whether democratic traditions have influenced cultural values or countries with certain cultural characteristics are more likely to develop democracy. The important finding here is that communist countries share a lot of commonalities with regard to cultural values which distinguish them from the countries with longer democratic traditions. This provides convincing evidence in support of hypothesis 1C.

Figure 6 Regionalization of the data: experiencing communism

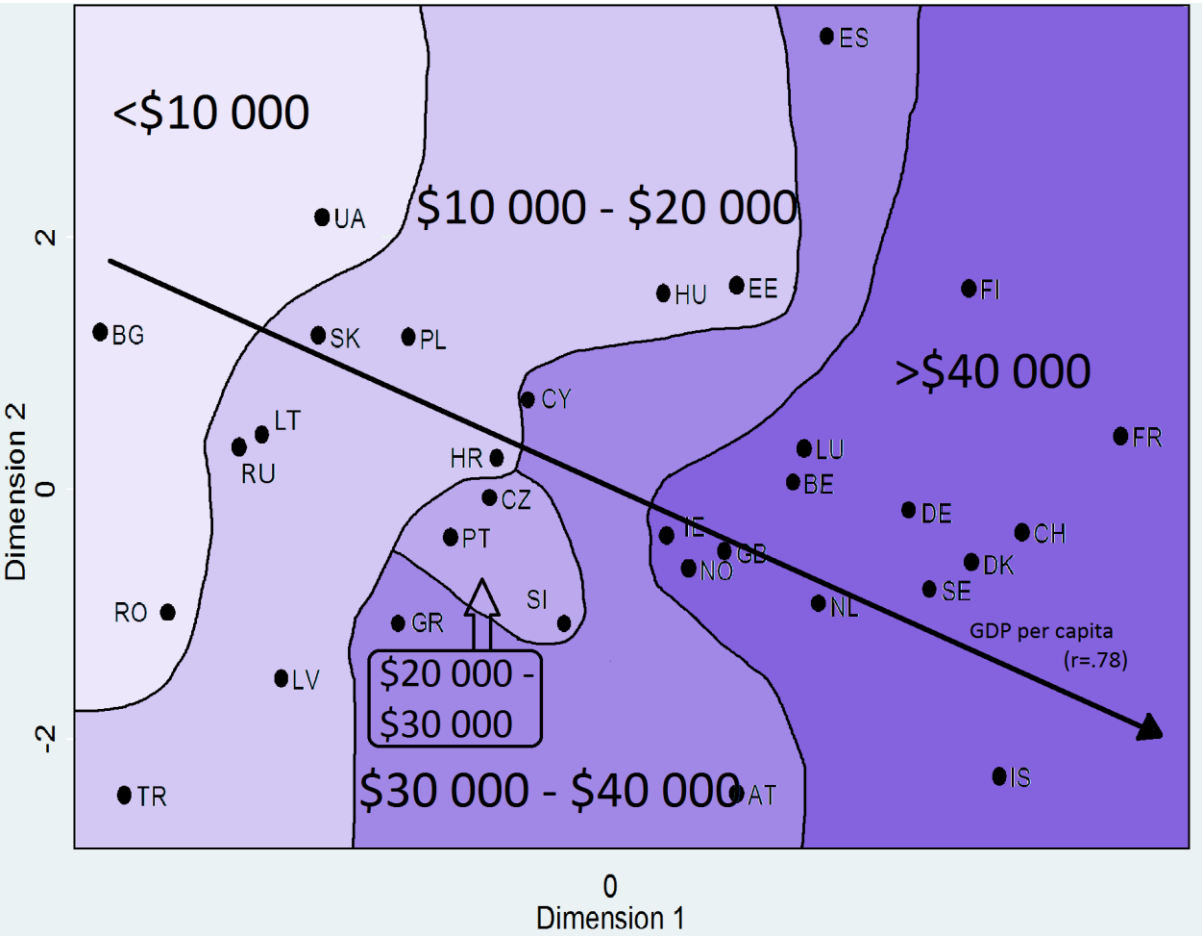


Source: ESS 2008 (2004 and 2010), computation and drawing mine. Stress value: 0.088.

The explanatory power of the alternative economic development factor is demonstrated on Figure 7. It appears as a strong predictor of cultural distinction as we can observe quite a linear development from the left and slightly upper corner of the plot to the right and slightly lower corner with each 10 000 dollars increase in the GDP per capita. The metric nature of the predictor variable provides us with the opportunity to draw a vector on the plot which facilitates with the interpretation of the results. First of all, it displays the exact direction of its effect and furthermore the r-value of the vector demonstrates how well it explains the constellation of the countries on the 2 dimensions of the figure. It implies that the economic development underlies the constellation of the countries on the plot to a very high degree. There are, however, important notes that need to be made. Economic development seems to be related primarily with the cultural dimension Autonomy/Embeddedness and to a slightly lesser degree with the Egalitarianism/Hierarchy, but it doesn't seem to be associated with any of the ends of the Mastery/Harmony dimension. This fits somewhat well with the hypothesized relationship outlined in the theoretical framework. It needs to be underlined,

however, that similarities in the level of economic development doesn't seem to be so clearly associated with overall cultural similarities. The geometrical distance between Spain and Austria, for example, which fall into the same category of degree of economic development is about 30% larger than that between Ukraine (GDP $2,545 per capita) and Norway (GDP $95,190 per capita). Another important note is that the so proposed regionalization is rather objective but, despite of that, there is high heterogeneity within regions. Ukraine, for instance has 3.7 times lower GDP per capita than Romania which is in the same category. The differences are especially notable in the high income category. Norway and Great Britain, for example, seem to be extremely close culturally while the first is 2.2 times wealthier than the later. Further regionalization within this cluster, consequently would not bring any meaningful interpretation of the effect of economic development. What this cluster of countries has in common is not an actual similarity in economic development but rather their belongingness to the Western Civilization and that they are all comparatively wealthy. Nevertheless, overall the association between the level of affluence and the cultural groupings is apparent and therefore we have all reasons to confirm hypothesis 2 as true.

Figure 7. Regionalization of the data: economic development



Source: ESS 2008 (2004 and 2010), computation and drawing mine. Stress value: 0.088.

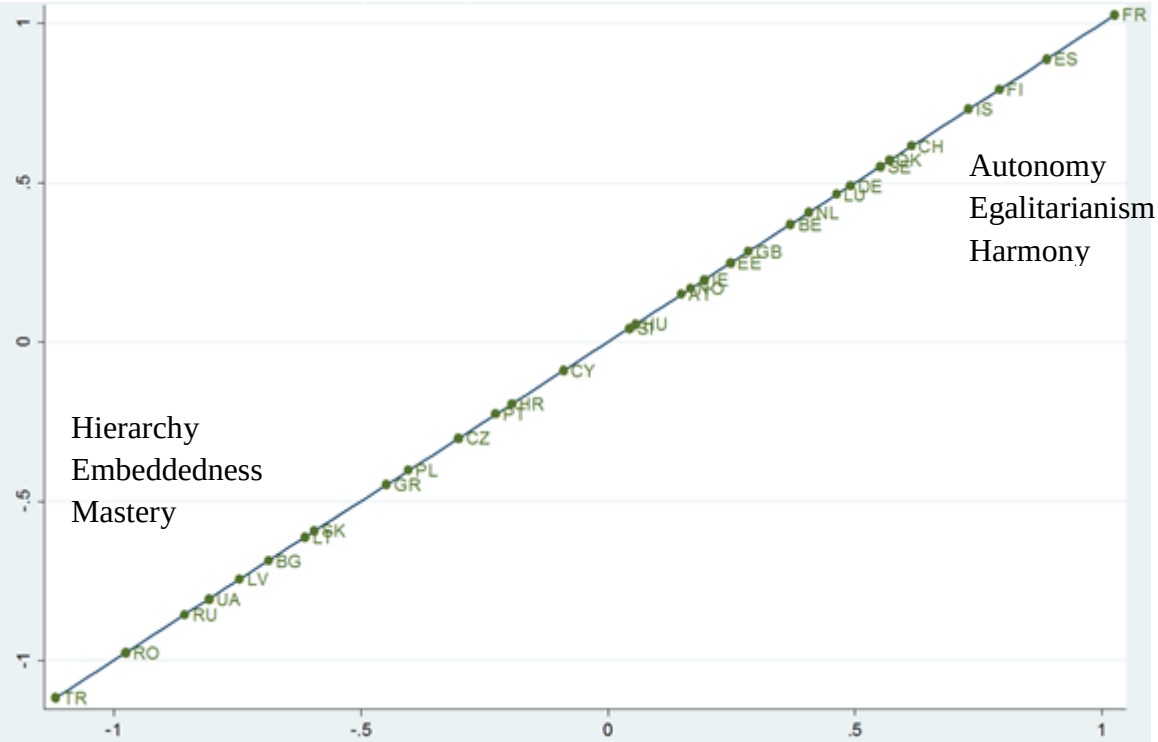
The above 4 figures provide us with a great insight on the relevance of the drivers of cultural heterogeneity. The plots demonstrate visually that each of the factors is able to contribute to our understanding of what makes societies different. It is, however, impossible with this statistical method to assess which factors are more important than the others. Moreover, many of the factors are obviously overlapping. For example, Bulgaria, which is located on the very left corner of the figure and slightly towards the top, is at the same time Orthodox, Slavic, Ex-Communist and has a low GDP per capita as are the other neighbouring countries on the plot. What exactly predicts the position of the country on the two-dimensional plot in this case? Unfortunately MDS is limited in its ability to answer this sort of questions.

Part II: Explaining cultural (dis)similarities

In order to answer the research questions of interest more conclusively, we need to proceed with a further analysis. On figure 8 the same 32 European countries are nested on a one-

dimensional plot where the interpretation of the distances between countries is principally the same as in the 2-dimensional plot – short distances between countries represent minor cultural differences while large distances entail more dissimilar cultures.

Figure 8. One-dimensional plot[10]



Source: ESS 2008 (2004 and 2010), computation mine. Stress value: 0.198.

The so constructed index of cultural (dis)similarities is rather abstract but it also has content. Regression analyses presented in table 3 facilitate in understanding the position of the countries. Coefficients with a positive sign such as Intellectual and Affectual Autonomy, Egalitarianism and Harmony are these that describe the countries which are located towards the right corner of the figure, while values with a negative coefficient such as Hierarchy, Mastery and Embeddedness are more peculiar to the countries which lie on the left side. Figure 8 also confirms the impression from the two-dimensional plot that the greatest variation between countries is on dimension 1. The vectors on the plot which were facing towards the left hand side are now again peculiar to the countries on the left side of the one-dimensional plot and the vectors facing right are respectively characterising the countries on the right side of the plot. The one-dimensional solution, as it was mentioned in the methodological introduction, serves no other purpose but to provide us with a single

[10] The countries are presented on a 2-dimensional plot only to improve the readability of the country labels. The x- and y-axes present basically the same information – the position of the countries on the 1-dimensional plot.

dependent variable entailing cultural (dis)similarity between countries which can be used in a linear regression analysis to compare the effects of all factors. This index varies from approximately -1 to approximately +1, as it can be seen on Figure 8. It has to be mentioned that the approach chosen here possibly puts the modernization theory explanatory variable in a slightly disadvantaged position as it is supposedly correlated more strongly to only 5 out of the 7 cultural value orientations while it favours an interpretation of diffusion of values as a whole. The supplementary regressions, however, indicate that the one-dimensional plot is more highly correlated exactly with the cultural dimensions which are supposedly strongly associated with economic development.

Table 3. Regression results explaining the position of the countries on the one-dimensional plot

Explanatory variables	Coefficient*	Intercept	P-value	R-squared
7 cultural value orientations:				
Affectual Autonomy	**1.71**	**.44**	**.000**	**.48**
Intellectual Autonomy	**2.75**	**-.873**	**.000**	**.73**
Embeddedness	**-1.98**	**.215**	**.000**	**.34**
Hierarchy	**-1.75**	**-1.30**	**.000**	**.86**
Egalitarianism	**2.698**	**-1.68**	**.000**	**.84**
Mastery	**-2.49**	**-1.49**	**.000**	**.56**
Harmony	**1.66**	**-.954**	**.000**	**.19**
3 cultural value dimensions:				
Autonomy - Embeddedness	**.85**	**.045**	**.000**	**.61**
Egalitarianism – Hierarchy	**1.14**	**-1.56**	**.000**	**.92**
Harmony – Mastery	**1.43**	**-1.67**	**.000**	**.48**

*Unstandardized coefficient.

Table 4 presents results from linear regression analyses with all explanatory variables considered in this research report. Model I demonstrates that economic development is a very strong explanator of cultural (dis)similarity with an R-squared indicating that about half of the total variation in the dependent variable is explained solely by countries' GDP per capita. The positive sign of the coefficient substantially means that countries with higher level of economic development are located towards the right hand side of the plot, indicating higher importance of Intellectual and Affectual Autonomy, Egalitarianism and Harmony. The

(standardized) regression coefficient suggests that with an increase of GDP per capita with one standard deviation the countries move toward the right side of the plot with 0.71 units. The goodness of fit of the model is exceptionally high especially bearing in mind that the one-dimensional solution presents the real cultural (dis)similarities significantly less than perfectly. This provides some indirect evidence that the index of cultural (dis)similarities is meaningful and it doesn't discriminate GDP per capita as an explanatory factor, even though this cannot be proved with certainty. Model II tests the effect of the most significant civilizational factor according to Huntington – religion. As his theory predicts, the differences between Protestantism (the reference category) and Catholicism is minimal and the coefficient is barely statistically significant. Orthodoxy religion, however, is a strong predictor of cultural (dis)similarity. Countries where this religious denomination is predominant are located towards the left side of the plot compared to the Protestant countries which are on the right hand side. As Turkey is the only Muslim country, its inclusion in the regression wouldn't be that meaningful. Despite of that, its position on the one-dimensional plot is more than self-evident – this religious denomination is associated with the greatest cultural distance from the Protestant countries. All in total religious denominations explain again nearly half of the variation in cultural (dis)similarities. Model III includes a dummy variable for experiencing communism which also proves to be a highly relevant explanatory variable. Countries with communist past are located on the left hand side of the plot, indicating higher levels of Hierarchy, Embeddedness and Mastery. R-squared for this model is also extremely high with 56% of the variation explained by this single binary explanatory variable. The last of the civilizational factors tested in the regression analyses is language family presented in Model IV. Countries where Romance and Uralic languages are spoken do not significantly differ from the Germanic-language-speaking countries with regard to culture. Slavic-, Turkic-, Baltic-, and to lesser extend also Greek-language-speaking countries appear to be culturally more distant from the reference category, the Germanic-speaking countries. The goodness of fir of the model is also incredibly high with R-squared of .56 but which is partly due to the large number of explanatory variables and therefore the adjusted R-squared is slightly lower at .48.

What should ideally be done next is to test the combined effect of all civilizational factors in one model and to add the modernization theory variable in a second model to compare the effects of all factors. A regression model with 32 observations, however, lacks sufficient statistical power to incorporate all 10 civilizational variables plus 1 from modernization

theory. What's more, the civilizational factors significantly overlap. Therefore, the inclusion of a large number of explanatory variables diminishes the statistical significance of all coeffients. As a solution of compromise we can take into account the religious denomination and ex-communism in one model and compare its effect to economic development in a second one. As it is seen in Model V the effect of the religious denomination and communist past remain strong and statistically significant with the exception of Catholicism which decreases in size and loses statistical significance. These factors combined explain already impressive three thirds of the variation in cultural (dis)similarity. Finally, in Model VI GDP per capita is added to the model. The results are striking - GDP per capita, previously found to be highly correlated, now its coefficient vanishes in size and loses statistical significance, while all other variables remain largely unchanged. What is also interesting is that the inclusion of GDP per capita does not contribute even a tiny bit to the total goodness of fit of the model – the R-squared remains at .74 while the Adjusted R-squared even decreases slightly due to the higher number of variables. These results imply that the GDP per capita has a spurious effect on the dependent variable, i.e. religious denomination and communist past predict country's level of economic development, while the later has no independent effect on cultural (dis)similarity (see Figure 9).

Alternative strategy to analyse the data with fewer independent variables is to include dichotomous variables for Slavic language (0 – all non-Slavic languages, 1 – Slavic languages) and Orthodoxy (0 – Protestant and Catholic, 1 – Orthodox) plus the ex-communism and GDP per capita variables in one model. This way we can test whether there is a distinctive Slavic-Orthodox cultural unit which is independent of the level of economic development. Turkey, as a single Muslim and Turkic language speaking country in the data set, does not contribute substantially to the model and can be omitted. The results presented in Model VII lead to the same conclusion: Orthodox religion and the interaction effect between Orthodoxy and Slavic language (but not Slavic language itself) as well as ex-communism have strong and significant effects on countries position on the cultural map of Europe, while GDP per capita again appears to be irrelevant factor. This finding contributes to the understanding of the Slavic-Orthodox civilization. It needs to be considered that all Slavic-Orthodox countries are at the same time ex-communist, thus, we can add up the effects of both factors. It appears that Slavic-Orthodox countries from the ex-communist Bloc are the most culturally distinctive group compared to the Western European cluster. Non-ex-communist Orthodox countries 'fit' into the civilization to a slightly lesser degree and Slavic

Non-Orthodox countries do not seem to belong to this group. Therefore, while language or kinship ties are relevant, religion seems to be the foundation of this particular civilization, and most importantly this is independent of the level of economic development.

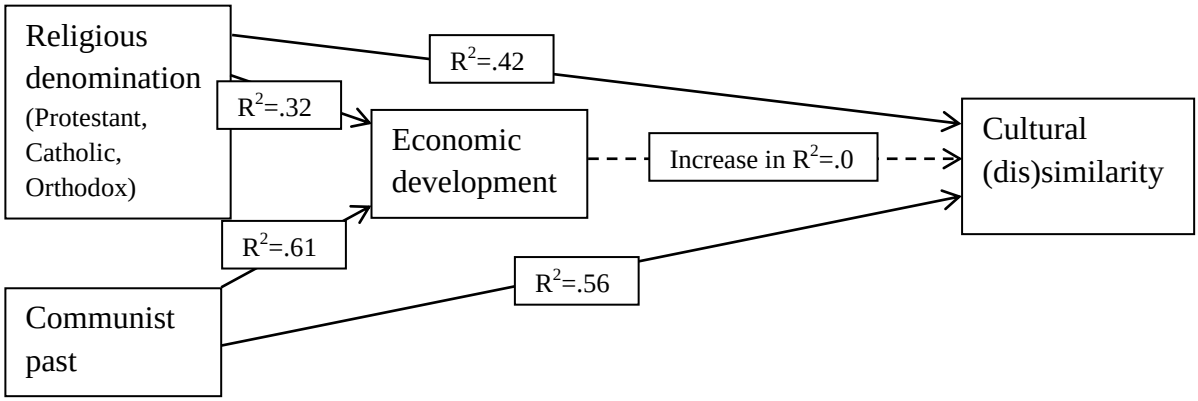
Table 4. Regression results. Explanators of cultural (dis)similarities

Explanatory variables	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII
GDP per capita	**.71****					.06	.07
Religion:							
Protestantism (ref.)							
Catholicism		-.28+			-.13	-.11	
Orthodox		**-.72****			**-.48****	**-.46****	
Ex-Communist			**-.75****		**-.60****	**-.56****	**-.55****
Language family:							
Germanic (ref.)							
Romance				-.13			
Uralic				-.03			
Slavic				**-.70****			
Baltic				**-.48****			
Greek				**-.30***			
Non-Slavic/Non-Orthodox (ref.)							
Orthodox/Non-Slavic							**-.38****
Slavic/Non-Orthodox							-.15
Orthodox/Slavic							**-.29***
Intercept	-.59**	.37**	.37**	.42**	.50**	.42**	.37
R-squared	.51	.42	.56	.56	.74	.74	.75
Adjusted R-squared	.49	.38	.54	.48	.71	.70	.70
N	31	31	31	31	31	31	31
Prob > F	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000

Standardized coefficients; Statistical significance: +<.10, **<.05, **<.01
Dependent variable: position on the 1- dimensional scale displaying similarities and dissimilarities with regard to 7 cultural value orientations

The findings of the above regressions imply that economic development is spuriously related to cultural values which confirms hypothesis 3. Since this is a completely new finding in the research of cultural values, it requires some more elaboration. An important issue which needs to be considered is multicolinearity. When faced with the same challenge to juxtapose the effect of religion and economic development Yuchtman-Yaar and Alkalay (2007) argue that the inclusion of both factors in the same regression is not feasible due to their substantial overlap. Despite of that formal tests for multicolinearity are not presented and the nature of the relationship between the three factors (religion, economic development and values) is not further discussed. As it was discovered in the MDS solution and confirmed in the regression analyses, there is apparently an overlap. Economic development, however, as a continuous variable, is substantively advantaged in explaining cultural differences compared to dummy variables for religious denomination and communism. That is, economic development should be well able to explain cultural differences within the Protestant, Catholic, Orthodox, long-time-democratic and ex-communist countries. This, however, is not evident based on the results of the regression analyses. What's more, formal test for multicolinearity demonstrates that this problem is present at a much lower level than what is considered acceptable (all variance inflation factors are below 4 and the mean one is 2.32). As it was outlined in the theoretical framework, there are good reasons to assume that economic development as well as cultural values are caused by cultural heritage factors. Figure 9 presents the proposed mechanism and the results from respective regression analyses.

Figure 9. Causal mechanism of the factors explaining cultural (dis)similarity



In line with the theoretical framework economic development seems to be predicted to a very high degree by the religious denomination and communist past. The cumulative explanatory power of Catholicism and Orthodoxy (compared to Protestantism) on economic development is about 32%, while this of communism is 61%. As they partly overlap, however, the

combined effect of these variables is 70%. This percentage would increase even further if we added Islam but again it is not so meaningful to include a variable for only one country. The wealth of the European countries consequently seems to be highly dependent on their cultural heritage. At the same time 74% of the cultural (dis)similarities can be predicted solely by the same two cultural heritage factors. Based on these results it is not surprising that the explanatory power of economic wealth diminishes from 51% when it is a single predictor to 0 once we control for the cultural heritage factors. This provides solid evidence in support of hypothesis 3 that there is a spurious relationship between economic development and cultural values.

Part III: Explaining individual cultural dimensions

In part II the unique and the combined effects of the factors were analysed as to their relevance in explaining overall cultural (dis)similarity in Europe which is the main interest in this Master thesis. From the results we can conclude that cultural convergence as a result of economic development is very unlikely. To be fair to modernization theory, however, it is necessary to analyse the potential effect of modernization on specific cultural values and to explore the possibility that value convergence is possible at least in certain aspects of culture. Analysing each cultural value would require 7 separate tables and therefore it was preferred to use the cultural value dimensions as dependent variables instead.

Table 5 presents the longitudinal analysis of the explanatory factors of Autonomy/Embeddedness values. The first pooled OLS regression, as it can be expected, demonstrates a positive and highly significant relationship between economic wealth and Autonomy values (respectively negative relationship to the opposite Embeddedness values). This single independent variable is able to explain again about half of the total variation in this value dimension. With an increase of 1000 US dollars in GDP per capita the countries score on this dimension increase by 0.018 units which is considerable bearing in mind the small variation in the dependent variable. It was also surprisingly identified that there is a statistically significant time effect in negative direction, that is, over time countries become less autonomous and more embedded. Similarly to what was done in part II, in the second pooled OLS model religion and communism were included and the results are again consistent with the previous findings – once we control for the effect of some cultural heritage factors, the effect of economic development diminishes and it is no longer statistically significant. The effect of Orthodoxy again seems to be particularly strong but

Catholicism also influences this value dimension, while communism has a less pronounced effect and its coefficient is not statistically significant at the conventionally used 5% level. The first FE model addresses the potential omitted variable bias by controlling for the effect of all time-constant variables which are no longer necessary to be included in the model. In this model the effect of GDP per capita entirely disappears suggesting that the estimates from the cross-sectional analysis are severely biased. The next two FE models explore the possibility of a lagged effect on cultural values. The first and the second lagged variables of GDP per capita do not provide any significant evidence in support of such speculation. As expected, the R-squared is respectively also of negligible size.

Table 5. Regression results. Explanators of the cultural dimension "Autonomy/Embeddedness"

	Pooled OLS	Pooled OLS	Fixed-Effects	Fixed-Effects	Fixed-Effects
GDP per capita (in thousands)	**.0177****	.0043	.0006	-.001	-.0026
GDP per capita T-1				.0035+	.0011
GDP per capita T-2					.0015
Religion:					
Protestantism (ref.)					
Catholicism		**-.2922***			
Orthodoxy		**-.7383****			
Ex-communist (no/yes)		-.3564+			
Time Effect	**Yes (-)****	No	No	No	No
Constant	-.278+	.26	-.005	-.025	.107
R^2	.46	.60			
R^2 (within)			.002	.07	.039
Number of observations	130	130	130	96	68
Number of cases			31	26	22

Standard error in parenthesis; Statistical significance: +<.10, *<.05, **<.01

Table 6 presents the outcomes from an analysis of the Egalitarianism/Hierarchy dimension. The results are nearly identical to these from the previous table. GDP per capita solely is associated with Egalitarianism values which is consistent with previous findings and the theoretical framework of modernization theory. There is again a statistically significant negative effect of time on this dimension. The inclusion of religious denominations and

communism, however, significantly affects the coefficient of GDP per capita downwards which again suggests a spurious relationship. This time Orthodox religion and communism are the most significant explanatory factors in the model while the effect of Catholicism is not statistically significant. The results from the three FE models lead to the same conclusion as neither of the coefficients of this variable is sizable and statistically significant.

Table 6. Regression results. Explanators of the cultural dimension "Egalitarianism/Hierarchy"

	Pooled OLS	Pooled OLS	Fixed-Effects	Fixed-Effects	Fixed-Effects
GDP per capita (in thousands)	**.0121****	.0016	.0017	-.0005	.0003
GDP per capita T-1				.0036	.0017
GDP per capita T-2					.0013
Religion:					
Protestantism (ref.)					
Catholicism		-.1216			
Orthodoxy		**-.452****			
Ex-communist (no/yes)		**-.3932****			
Time Effect	**Yes (-)***	No	No	No	No
Constant	1.28**	1.71**	1.46**	1.45**	1.49**
R^2	.41	.56			
R^2 (within)			.01	.065	.052
Number of observations	130	130	130	96	68
Number of cases			31	26	22

Standard error in parenthesis; Statistical significance: +<.10, *<.05, **<.01

The results from the analysis on the third cultural dimension, presented in Table 7, are even more curious. Consistent with the findings from Schwartz (2006), economically developed countries do not differ systematically with regard to Harmony and Mastery. The relationship remains not significant even when controlling for cultural heritage factors. Orthodoxy is the only factor included in the model which seems to be related to this cultural dimension, more precisely, Orthodox countries tend to emphasize Mastery and reject Harmony values. The relationship is, however, less strong compared to that from the previous two dimensions and the R-squared also indicates weak explanatory power of the model. Surprisingly, the FE model demonstrates that countries which experience economic growth are more likely to

embrace Mastery values. Given the simultaneity of the events, it is not entirely clear what the direction of causation is based on this model. The inclusion of a second lag of GDP per capita, however, suggests that it is the previously higher levels of economic development which causes societal culture to change towards higher emphasis of Mastery values. The R-squared of the final model indicates that economic development has a rather strong influence on this particular cultural dimension. Therefore, the analysis of this dimension once again demonstrates that the estimates from cross-sectional analysis are biased but this time downwards.

Table 7. Regression results. Explanators of the cultural dimension "Harmony/Mastery"

	Pooled OLS	Pooled OLS	Fixed-Effects	Fixed-Effects	Fixed-Effects
GDP per capita (in thousands)	.0006	-.0026	**-.0034***	.0005	.003
GDP per capita T-1				-.0043	-.0006
GDP per capita T-2					**-.0065***
Religion:					
Protestantism (ref.)					
Catholicism		-.116			
Orthodoxy		**-.242***			
Ex-communist (no/yes)		-.0534			
Time Effect	No	No	No	No	No
Constant	1.26**	1.46**	1.39**	1.42**	1.41**
R^2	.002	.076			
R^2 (within)			.05	.12	.33
Number of observations	130	130	130	96	68
Number of cases			31	26	22

Standard error in parenthesis; Statistical significance: +<.10, *<.05, **<.01

Overall, the findings from the longitudinal analysis are slightly more mixed. Spurious effect of economic development was once again identified but only with regard to Autonomy/Embeddedness and Egalitarianism/Hierarchy dimensions. These findings were confirmed in the pooled OLS analysis with control variables and in the FE models. The effect on Harmony/Mastery dimension, however, has been underestimated because countries which

experience economic growth tend to embrace Mastery values. Therefore, these significant discrepancies between cross-sectional and within-country estimators indicate that observed and unobserved characteristics of the countries seriously bias the estimates from between country comparisons. Economic growth seems to be indeed related to some limited amount of change in cultural values but not where modernization theory mostly expects, instead exactly where it predicts smaller effect and in opposite to the hypothesized direction.

Summary, conclusions and avenues for further research

Summary

In this research report I pose the importance of value consent as a prerequisite of a successful regional integration particularly with reference to the European and the Eurasian Union. The results from a MDS analysis demonstrate that the EU overstretches its cultural boundaries with each consecutive enlargement and already encompasses societies which are as distant culturally from the core EU states as are Russia and Turkey. What is more important, the countries founders of the European Union and the only representative of the Eurasian Union, Russia, are indeed strongly opposing to each other with regard to culture as they are positioned in opposite corners on the plot representing cultural (dis)similarities. Two of the most prominent theories in explaining cultural differences and similarities were utilized here in order to explain the constellation of the countries on the cultural map of Europe. The Huntington's clash of civilizations theory predicts that there are distinguishable civilizations in Europe, particularly Western European, Slavic-Orthodox and Islamic ones. This distinction is supposed to be based mainly on the predominant religious denomination and complementary on language and history. Three main concepts were considered crucial for explaining cultural (dis)similarities in Europe with regard to the clash of civilizations theory – predominant religion, language similarity and experience of communist rule – even though a larger array of cultural heritage factors were discussed. The overall framework developed in this Master thesis suggests manifold possible effect of each of the three factors on culture. Supposedly they influence cultural values directly but also indirectly through the homophily principle. This concept suggests that similarities between countries offer a common ground for an intense interaction between countries which share the same religion, historical traditions and geographic location and speak similar languages. Intense interaction respectively opens the opportunity for a diffusion of values across national borders. Cultural values are very likely to be spread between countries and therefore the Iron Curtain which

divided Europe for half a century most certainly have resulted in divergence of the cultures on both sides. The alternative, modernization theory states that the level of economic development drives countries' culture in a certain predictable direction which may result in convergence of cultural values in the future. Particularly people in affluent societies have the resources and therefore the ability to make free choices and to be autonomous. Wealthy countries consequently can be distinguished as emphasizing emancipative (Inglehart & Welzel, 2005), Self-Expression and Secular-Rational (Inglehart and Baker, 2000) or Autonomy, Egalitarian and Harmony (Schwartz, 2006) values in contrast to the less developed countries which emphasize their opposites – Survival, Traditional, Embeddedness, Hierarchy and Mastery. Following this theory in Europe we expected to observe gradual cultural differences which reflect levels of economic development.

According to the MDS analysis the countries with the same religious denomination do in general locate in separate cultural spaces. Catholic countries are, however, spread on a very large cultural space between the Protestant and Orthodox countries. The Catholic societies with long democratic traditions do not substantially differ from their Protestant counterparts, but these which have been exposed to communism seem to be influenced by the Orthodox culture. Another important finding is that the boundaries between the so proposed cultural clusters are not very clear and there is no real gap between them which leads to the conclusion that even though religion is important, it cannot explain all the variation. Nevertheless, the MDS analysis by itself provides sufficient evidence to conclude that distinct Western, Orthodox and Islamic cultural clusters do exist in Europe. It is a question of interpretation whether the differences between them are so sharp that we can label them civilizations and expect that they may clash. Language family and experiencing communism, which were considered as additional civilizational factors, also prove to be highly relevant in explaining cultural diversity even though the MDS was not able to give explicit answer as to what extent they are important in explaining culture. The MDS suggests clearly that GDP per capita affects cultural (dis)similarities in a linear manner and is able to explain a large share of the whole constellation of countries on the cultural map of Europe. Employing MDS technique and regionalizing the data based on each factor has contributed to the understanding of the nature of the relationships and it can be concluded that there is a substantial overlap between them. MDS, however, was not able to compare the effects of the factors and to conclusively decide in favour of one of the theories.

Additionally, a regression analysis was utilized to throw more light on this problem. The position of the countries on a one-dimensional plot, which represents the level of cultural (dis)similarities between them, was used as a dependent variable in separate models with the proposed explanatory variables. Each of the factors individually proved to be highly relevant in explaining cultural (dis)similarities with a similar explanatory power (R-squared between .42 and .56). When the variables were included in the same model, however, the effect of economic development diminished while 2 of the key civilizational factors, religion and communism, remain largely unchanged. These results imply that, contrary to what the modernization theory postulates, economic development has no independent effect on cultural differences in Europe. Further analysis confirms the proposition that there is a spurious relationship between economic development and cultural values. The reason is that both predictor and outcome variables are largely an outcome of a 'third variable', namely religion and communist past. Such findings are more in line with the Weberian theory (1958) which suggests that religion (and, more broadly speaking, culture) affects economic development rather than the other way around.

In the last part (pooled OLS analysis), it was analysed whether economic development, religious denomination and communism have independent effect on any of the 3 cultural dimensions. The results led to the same conclusion that economically developed countries emphasize Autonomy and Egalitarianism only if we don't take into account the alternative explanatory variables. They are also not associated with any end of the Harmony/Mastery dimension. Finally, the fixed-effects model estimated the pure effect of economic development on specific cultural values and it identified completely opposite relationship to that from the cross-sectional analysis. When countries become wealthier their values do not change in direction proposed by modernization theory – towards more Autonomy, Egalitarianism and Harmony – but they tend to embrace Mastery values. A causal relationship was confirmed with the use of lagged values of GDP per capita which suggests that the change in this value is with a delay of about 4 years.

In general the findings of the different approaches lead to the same conclusions. Cultural heritage factors are independent and much stronger predictors of cultural values. Level of modernization, measured by GDP per capita, seems to have little or no relevance in explaining cultural (dis)similarities. Omitted variable bias is found to be a significant problem in cross-sectional research on cultural values. The results from the more consistent fixed-effects estimator confirm that findings from cross-sectional analyses are severely

biased. Particularly the effect of economic wealth on Autonomy and Egalitarianism is overestimated while this on Mastery underestimated. Overall the findings conclude in favour of a cultural heritage explanation of cultural (dis)similarities and rejection of the proposition of modernization theory. Consequently, convergence of cultural values as a result of equalization of the economic development is not to be expected.

Conclusions and reflection on the geopolitical questions

These findings are directly related to the processes of integration in Europe. If cultural dissimilarities are not a result of the differences in the level of economic development but they are of civilizational nature, we cannot expect that cultural convergence is on the verge in Europe. The findings from the empirical analysis suggest that the cultural distances between countries and particularly between the Protestant and Catholic, the Orthodox and the Islamic countries seem to be resistant to the level of economic development. Such interpretation implies that there is a little common ground for integration of all European countries into one political and economic supranational organization. Contrary to that, the formation of a competitive Eurasian Union in the eastern parts of the continent can be justified by the existence of a unique Slavic-Orthodox culture. Therefore, if we accept the proposition that value consent is crucial factor for a successful integration, we can expect stagnation of the enlargement of the EU to the east and deepening of the regionalizational processes in the Slavic-Orthodox world which could potentially include not only most of the ex-Soviet republics but also other countries in the region sharing similar societal values. At the same time the integration of the EU with Turkey seems to be hindered not only by differences in the religious denomination and historical and political traditions but also by an objective cultural gap between the Muslim and the Western countries.

Referring to the title of this Master thesis, it can be concluded that there is rather a "clash of civilizations". However, do cultural differences inevitably lead to a clash? Huntington gives the answer that *"differences do not necessarily mean conflict, and conflict does not necessary mean violence"* (1993, p. 25). The crisis in Ukraine which busted at the beginning of 2014 indicates that such cultural differences indeed may become a source of a conflict. It has been suggested on a number of occasions that there is little common ground in the positions of both sides of the conflict. The USA and Europe on one side and Russia on the other both accuse the other of hypocrisy and aggression.

The Ukrainian society also appears to be deeply divided in their "civilizational consciousness". Despite of what Huntington argues, the dividing line doesn't split the country on religious principle. The Catholic minority in the very western part of the country bordering Poland and Hungary doesn't seem to be the only part of Ukraine which supports the integration of the country with the European Union. According to Huntington's thesis the greatest part of the country belongs culturally and historically to the Slavic-Orthodox civilization. This is confirmed by the MDS analysis, considering the small cultural gap between Russia and Ukraine. The majority of the country, nevertheless, desires to have strong ties with EU (43%) compared to Russia (18%)[11]. Consequently, a clear distinction needs to be made between the two characteristics of Huntington's civilizations – culture and identity. While obviously interrelated, they can significantly differ.

The MDS plot objectively identifies two cultural clusters – Eastern European and Western European. This, however, is more likely to be an artefact from the previous division of the continent on ideological principle. With the fall of the Berlin wall, as Huntington argues, it was the identity of the Central European nations which guided their choice to integrate into the European Union and NATO. Accepting the concept of diffusion of values, it can be expected that their cultural characteristics can be changed as a result of the integrational process with Western Europe. Economic growth is also likely to be experienced simultaneously but the results of this analysis suggest that this doesn't by itself alter people's values. The intense interaction between the members of the EU in all spheres of life are, however, likely to result in cultural convergence or at least in a development in the same direction. Therefore, it can be speculated that the Central and Eastern European countries with predominant Catholic and Protestant religions are in transitional processes of tearing apart from the Soviet influence and bringing together with Western Europe.

Nevertheless, historical ties remain important for both culture and identity. The MDS analysis indicated that, despite of a long process of integration into the Western structures and economic affluence, predominantly Orthodox countries such as Greece and Cyprus have still not abandoned their traditional culture. They are only marginally closer to the Western European cluster but remain within the boundaries of their own civilization. To underline the importance of historical traditions Huntington notes that Greece may have been a member of the Western economic and security structures but it *"has never been an easy member of*

[11] Spring 2014 Global Attitudes Survey. UKR6, Pew Research Center. Note: question not asked in Crimea.

either the EU or NATO and has had difficulty to adapt to the principles and mores of both" (1996, pp. 162-163). Despite of that Greece is likely to continue its integrational processes with the West. This opinion can be supported by the special role which Greece has as a predecessor of both Western and Orthodox civilizations, as Huntington claims. The results of this analysis indicate that countries which are both Orthodox and ex-communist are more likely to be culturally distinct from Western Europe. Greece is only Orthodox and not Slavic or ex-communist and considering its significant role in the Western civilization it doesn't seem to be susceptible to drifting away from its structures. Despite of that, due to its historical traditions, Greece will most likely remains a cultural outlier in the EU which predisposes the country to experience difficulties with its successful integration.

Based on the results from this Master thesis, it appears that Bulgaria and Romania are particularly problematic with regard to their cultural integration in the EU. The cultural differences between these two member states and the backbone countries such as Germany and France are most apparent. This can explain the longer period Bulgaria and Romania required for their accession as full members compared to their other ex-communist counterparts. As of 2014, or 7 years after they have been granted a full membership, they remain the most prominent outsiders in most economic and social indicators. Supposedly this could be due to their cultural distinctiveness as the only both Orthodox and ex-communist members of the EU. In interview for Berliner Zeitung the president of the EU-commission Manuel Barroso (2014) justifies the accession of the two countries as a preventive measure against drifting towards Russia. Based on the Huntington's theory, this would be indeed the natural direction of Bulgaria and Romania. The position of the latter is, however, more uncertain. Huntington describes it as one of the cleft countries referring to the Catholic Hungarian minority which has been historically part of the Austro-Hungarian Empire. The country is also supposedly torn in its identity. On one side it is Orthodox which is the founding ground for the civilization but it is also Romance-speaking and has a national identity of a successor of the Roman Empire. Therefore, applying Huntington's logic, Romania is rather in the cultural space where civilizations *"blend and overlap"* (1993, p. 24).

Bulgaria, as the only both Slavic and Orthodox member state, is particularly susceptible to Russian influence and to developing pro-Russian attitudes. According to data from Central and Eastern Eurobarometer 1990-1997 Bulgarians are 2.3 times more likely to see their future

tied up with Russia (18.6%) compared to Romanians (8.1%)[12] (Akaliyski, 2012). Another report of the public opinion in 13 EU member states from 2011 ("Bulgaria," 2011) describes Bulgaria as *"by far the most Russia-friendly country among all nations surveyed"* with 88% of the people expressing positive opinion towards Russia. A more recent survey from April 2014 directly asks Bulgarians what they would vote for if there was a referendum on the membership of the country in geopolitical organizations. As much as 22% of the respondents desire their country to join the Eurasian Union compared to 40% wanting to remain in the EU ("22% of Bulgarians want to join Russia's 'Eurasian Union'," 2014). These results are surprising due to the lack of any public debate on the topic of the Eurasian Union and overwhelming support for the European integration indicated by virtually all parliamentary represented political parties and even the Eurosceptic far-right party 'Ataka' (Akaliyski, 2012). Therefore, culture as well as religious, linguistic and historical ties seems to be relevant in explaining the geopolitical orientation of the country. This must be a warning sign to European policy-makers that culture and identity are indeed relevant and may become reasons for some member states to drift away from the Union.

Based on the results from this research, it could be speculated that all Orthodox and to a much higher extend the ex-communist Slavic-Orthodox countries are susceptible to joining the Eurasian Union. As it was, suggested above, even current EU member states are not insured against developing pro Eurasian Union attitudes. Countries outside of the EU and especially those having been part of the Russian Empire and later of the Soviet Union are much more likely to be attracted as member states. Among them Belorussia, which is predominantly Orthodox and Slavic-speaking country, appears to be one of the firm members of the Eurasian project. Kazakhstan, where approximately half of the population is Orthodox and have Slavic origin (Russian, Ukrainian and Belorussian), has also decisive position on the direction of its future development. Armenia, as another Orthodox country, has expressed its interest in joining the Eurasian Union while predominantly Muslim and rooted in its Turkic origin, Azerbaijan doesn't yet have any intentions of joining the new geopolitical project (Henley, 2014).

Applying Huntington's logic, it can be expected that Ukraine is the other most natural member of the Eurasian Union. As the second biggest Slavic-Orthodox country after Russia, it has been suggested that it holds the key to the success of 'Putin's dream' (Heritage, 2013).

[12] Data is aggregated for the whole period

It appears, however, that it is one of the most prominent examples of both 'torn' and 'cleft' country. The supporters of orientation towards Russia and those towards the EU have both repeatedly gained a slight political advantage during the last 23 years but the country still remains deeply divided and as of May 2014 on the brink of civil war. Protesters from the Euromaidan have commonly expressed their desire to be part of Europe for the reason that they share the European values. The interim prime minister of Ukraine Arseniy Yatsenyuk stated that signing the agreement for association with the EU in March 2014 indicates that *"Ukraine shares European values"* (Yatsenyuk, 2014), obviously referring to the values of Western Europe and not Europe as a whole. Such a statement, however, is not supported by the findings from this Master thesis. Contrary, Ukrainians seem to be sharing 'Russian' values to much higher degree than these of any Western European country. What is more, the cultural values measured by Schwartz refer to a desired end state of society and not to some form of current phenomenon which ought to be changed. Using Huntington's framework it can be supposed that these values are deeply rooted in the countries' historical traditions and the change is rather slow and limited. 'European values', therefore, cannot be expressed or changed by signing a document. 'Sharing the European values' can hardly justify the orientation of the country towards the West, contrary, it makes it more peculiar. At the same time the European Union doesn't give clear signals about its intentions with regard to Ukraine: *"Ukraine is not ready today, neither it will be ready in the near future* [for joining the EU]*"* (Barroso, 2014). In order for a country to re-establish its civilizational position, Huntington underlines three main criteria (1) the elite of the country needs to be unified in its position about this change, (2) the people need to support the new direction and (3) the receiving civilization needs to welcome the new member. Neither of these criteria is fully applicable to the current situation in Ukraine. The political elite at present seems to be the most determined one to change country's direction, but it was so after the Orange Revolution from 2004 and before the pro-Russian candidate, Yanukovich, was elected for president in 2010. The people are not only deeply divided in their identity but also ready to fight for their opinion, while objectively speaking Ukraine remains a typical Slavic-Orthodox country with regard to its culture. Applying Huntington's framework, which is supported by this research, it can be expected that in the long run Ukraine is more likely to become a member of the Eurasian Union than the European Union and NATO.

Self-evaluation

On the positive side, this analysis provides us with a good overview of the cultural differences and similarities in the context of Europe. It builds on our empirical knowledge with regard to the two most prominent theories explaining cultural heterogeneity and it makes decisive conclusions in favour of the clash of civilizations theory with the use of MDS, linear regression analyses, pooled OLS and fixed-effects methods. Theoretically, it offers mechanism for the effect of cultural heritage factors on values which is missing in the Huntington's theory and its interpretations. Furthermore, it explores the possibility of a spurious relationship between economic development and culture which is only marginally implied in the texts from Huntington. It provides theoretical framework and empirical evidence that indeed both cultural values and economic development are caused by the cultural heritage of the countries such as religion and communism. An important accent is placed on the limitations of the cross-sectional research and the use of longitudinal analysis is justified theoretically and implemented empirically.

Along with these achievements, there are certainly some limitations. First of all, it utilizes only one particular framework for analysing cultural values, these from Schwartz (2006). It was, however, discussed that other approaches exist and they only partly overlap. Therefore, the results of this analysis need to be interpreted with caution with regard to their overall application to culture and cultural change. Another important limitation is the suboptimal choice of explanatory variables. The theoretical framework of modernization theory suggests that not only economic resources but also education, urbanization, social capital, share of the labour force in industry and services among others can be used as indicators of the level of modernization. This Master thesis utilizes only GDP per capita as an indicator for the level of economic development but even this is not a perfect measure of the availability of economic resources. Therefore, a more rigorous analysis of modernization theory would require the implementation of a larger array of possible measures of modernization. For this reason the findings from this analysis cannot be taken as a conclusive proof of the irrelevance of modernization in explaining cultural values. Predominant religion, language family and communism are also not optimal indicators for the cultural heritage of the countries and their limitations were well discussed in the theoretical framework and the operationalization subchapter. Furthermore, the 12 years period analysed in the Fixed-Effects model is rather limited and it can be argued that the long run development of the country is more relevant in explaining cultural differences and similarities. It is possible that the change in cultural values

appears with a longer delay than the 2 and 4 years lagged variables of GDP per capita included in the model. Another considerable limitation is that the proposed manifold effect of the cultural heritage variables could not be distinguished in the statistical analysis while this is important for the interpretations of the results. It makes a big difference whether religion and communism as ideologies and language similarities as genetic ties have direct effect on culture or they are only commonalities which facilitate the diffusion of the values between countries. The framework of diffusion of values as a result of intense interaction allows for more change and possibly convergence of values while the direct effect of these factors implies considerable persistence of the local cultures.

Avenues for further research

Further research on this topic would be beneficial if it integrates other theories explaining cultural diversity and includes more measures of modernization and cultural heritage factors. The possibility of diffusion of values across borders requires further examination with the use of refined spatial econometrics techniques. This would allow for some separation of the effect of diffusion of values and this which can be rooted to the religious and historical traditions of the countries. One of the key messages outlined in this Master thesis is the need of more longitudinal analyses on value change which is able to establish a causal relationship. Such data on a country level are currently limited but it needs to be acknowledged that it is required for further research on the topic. Data on individual level are more often available and the mechanisms of the modernization theory can be finely tested for their relevance by using them. Considering the limitations of cross-sectional analysis, the future research on cultural values certainly lies in the use of more advanced longitudinal methods of analysis.

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Appendix

Western Civilization countries:

Catholic: Austria, Belgium, Croatia, Czech Rep., Spain, France, Hungary, Ireland, Lithuania, Luxembourg, Poland, Portugal, Slovenia, Slovakia

Protestant: Denmark, Estonia, Finland, Germany, Great Britain, Iceland, Latvia, Netherlands, Norway, Sweden and Switzerland

Orthodox countries: Bulgaria, Cyprus, Greece, Romania, Russia and Ukraine

Muslim countries: Turkey

Countries by language groups:

Germanic: Austria, Belgium, Denmark, Germany, Great Britain, Iceland, Ireland, Luxembourg, Netherlands, Norway, Sweden and Switzerland.

Slavic: Bulgaria, Croatia, Czech Rep., Poland, Russia, Slovenia, Slovakia and Ukraine

Romance: Spain, France, Portugal and Romania

Uralic: Estonia, Finland and Hungary

Baltic: Latvia and Lithuania

Greek: Greece and Cyprus

Turkic: Turkey

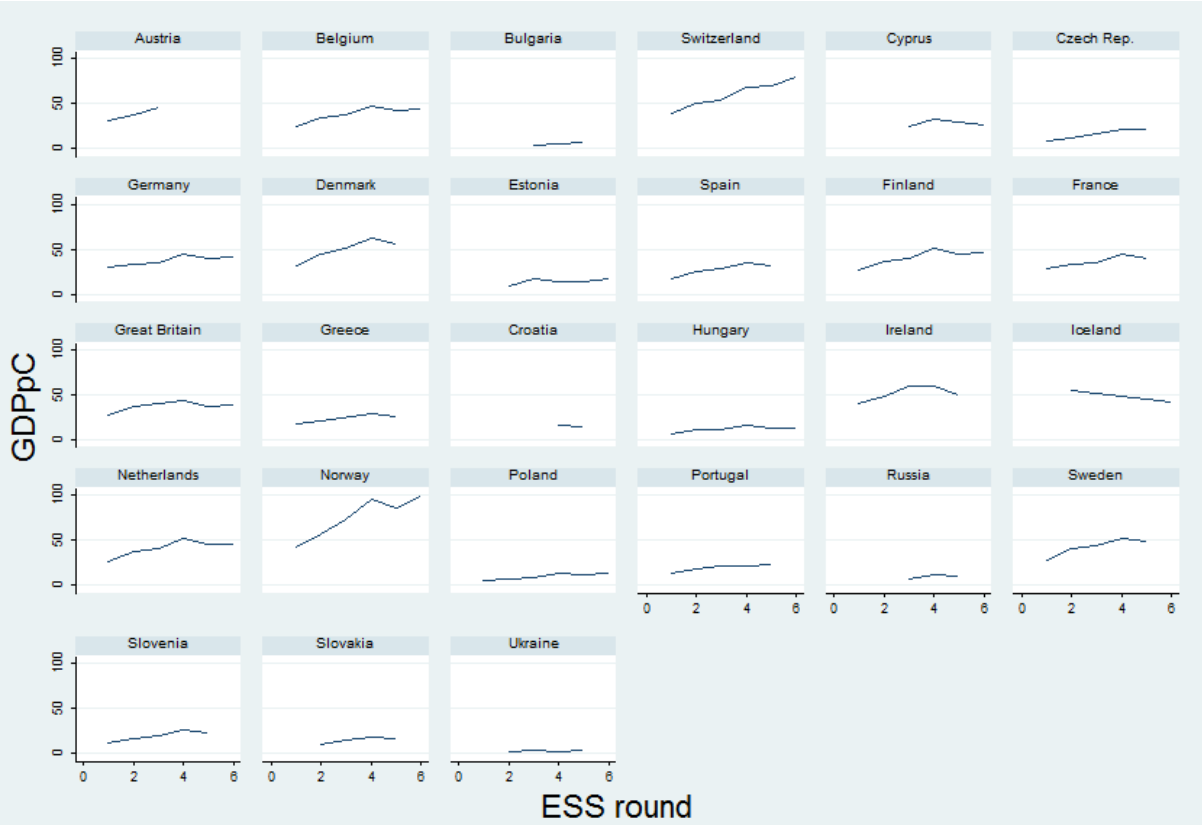
Ex-communist countries:

Soviet Block: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia and Ukraine[13]

Ex-Yugoslavia: Croatia and Slovenia

[13] Germany was classified as non-ex-communist as the greatest majority of modern Germany was living in the former democratic West Germany.

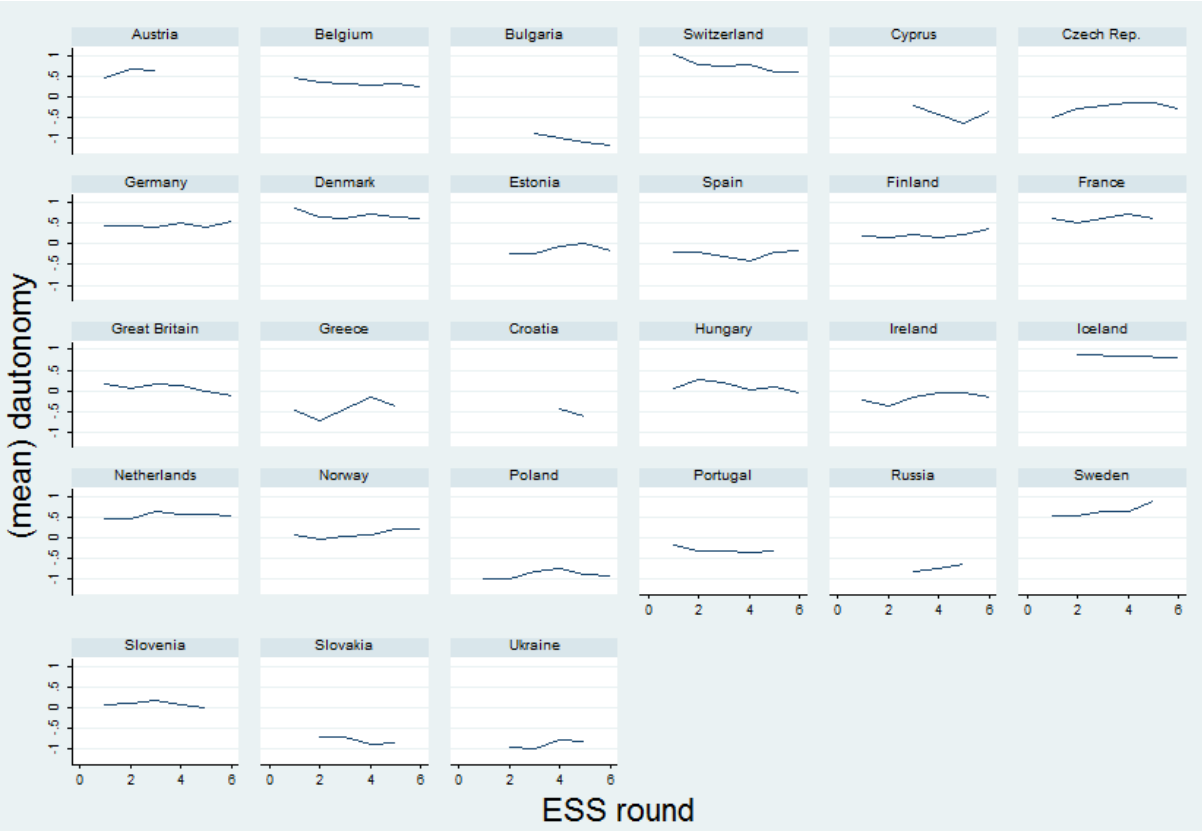
Figure 10. Graphical presentation of change in GDP per capita from 2002 to 2012[14]



Source: World Bank

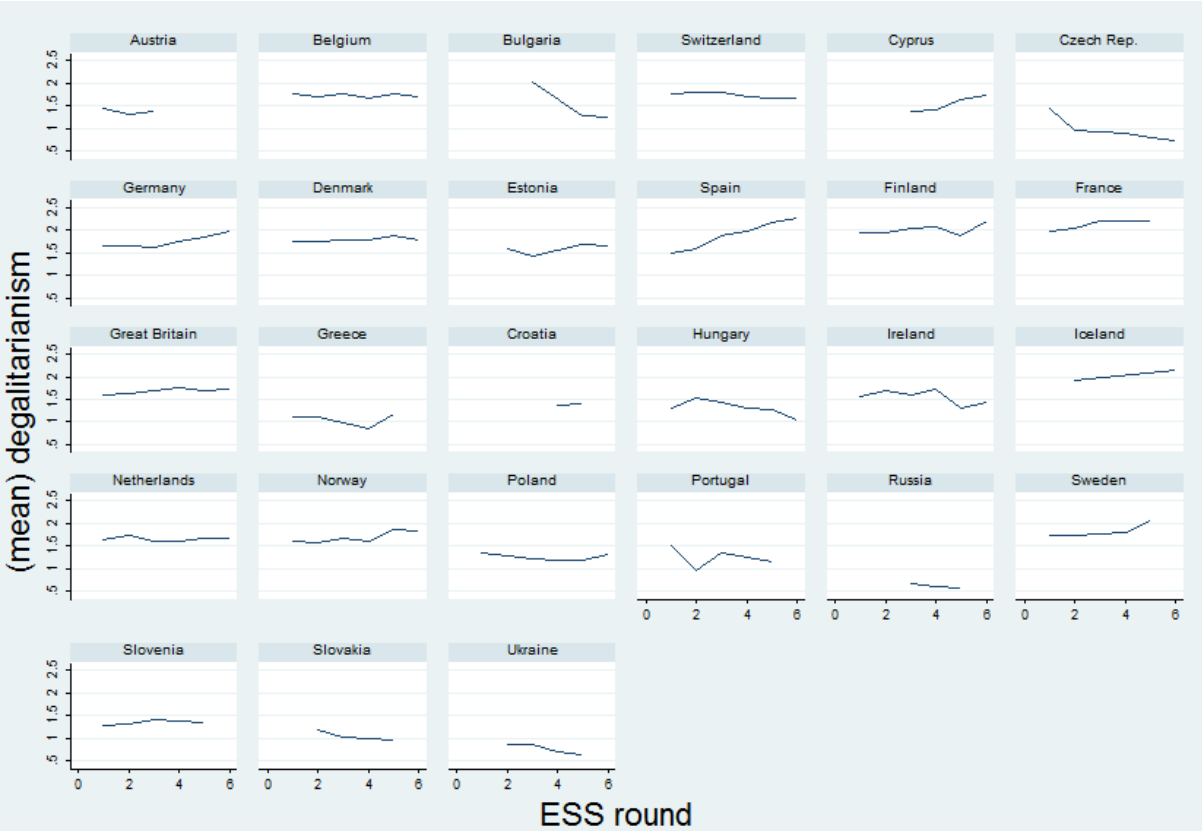
[14] Countries with only one time point of observation are not included in the graphs.

Figure 11. Graphical presentation of the change in the mean value of the cultural dimension "Autonomy/Embeddedness" from 2002 to 2012



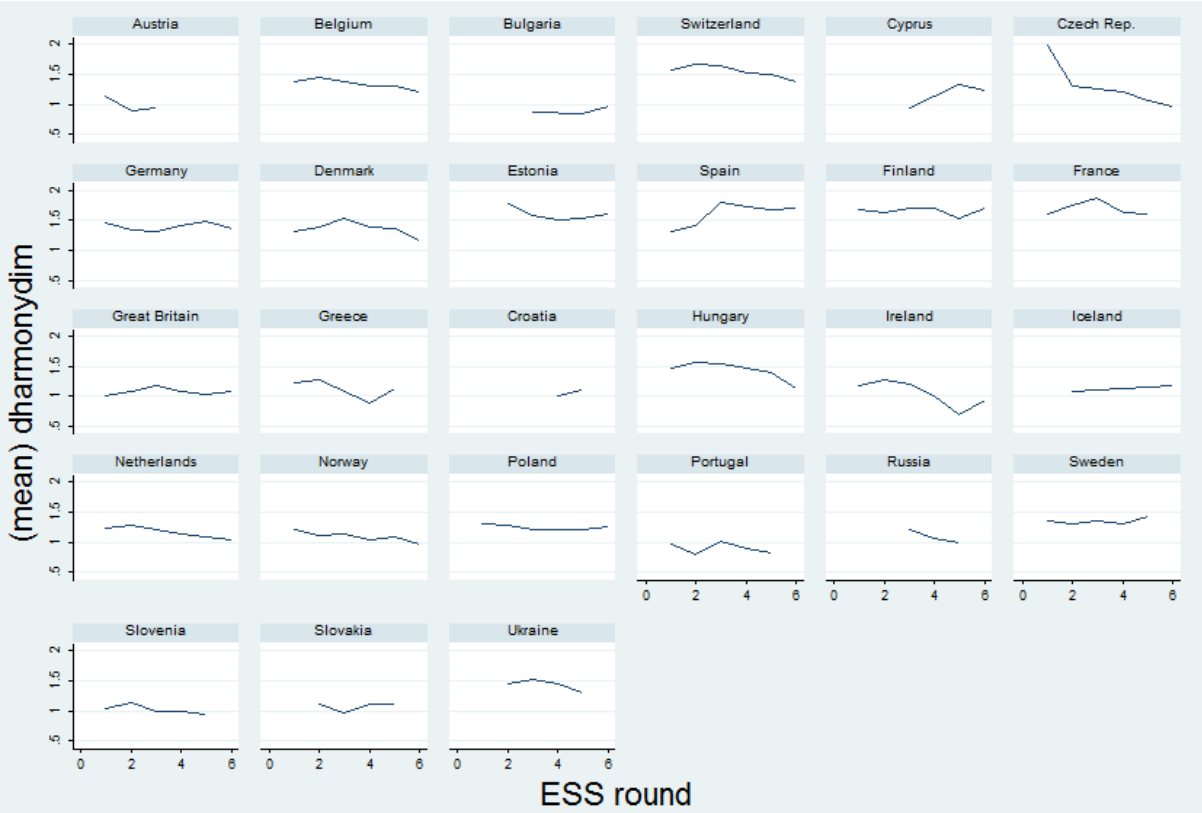
Source: ESS Round 1 to 6

Figure 12. Graphical representation of the change in the mean value of the cultural dimension "Egalitarianism/Hierarchy" from 2002 to 2012



Source: ESS Round 1 to 6

Figure 13. Graphical presentation of the change in the mean value of the cultural dimension "Harmony/Mastery" from 2002 to 2012



Source: ESS Round 1 to 6

Table 8. Descriptive statistics of GDP per capita for the respective round of ESS and year of survey

ESS round	Year of survey	Country	GDPpC (in thousand USD)[15]	ESS round	Year of survey	Country	GDPpC (in thousand USD)
1	2003	Austria	31.269	2	2005	Greece	21.621
2	2005	Austria	37.067	4	2009	Greece	28.452
3	2007	Austria	45.181	5	2011	Greece	25.631
1	2002	Belgium	24.465	4	2009	Croatia	15.696
2	2004	Belgium	34.707	5	2011	Croatia	14.435
3	2006	Belgium	37.919	1	2002	Hungary	6.535
4	2008	Belgium	47.374	2	2005	Hungary	10.937
5	2010	Belgium	42.96	3	2006	Hungary	11.174
6	2012	Belgium	43.372	4	2008	Hungary	15.365
3	2006	Bulgaria	3.249	5	2009	Hungary	12.635
5	2011	Bulgaria	7.287	6	2012	Hungary	12.75
6	2013	Bulgaria	No data	1	2003	Ireland	39.717
1	2002	Switzerland	39.35	2	2005	Ireland	48.698
2	2004	Switzerland	50.642	3	2007	Ireland	59.577
3	2006	Switzerland	54.14	4	2008	Ireland	59.66
4	2008	Switzerland	68.555	5	2011	Ireland	49.344
5	2010	Switzerland	70.37	6	2013	Ireland	No data
6	2012	Switzerland	78.925	1	2002	Israel	17.195
3	2006	Cyprus	23.864	2	2005	Iceland	54.885
4	2008	Cyprus	31.928	6	2012	Iceland	42.416
5	2011	Cyprus	29.207	2	2004	Luxembourg	74.389
6	2012	Cyprus	26.07	4	2009	Latvia	11.476
1	2002	Czech Rep.	7.685	5	2011	Lithuania	14.148
2	2004	Czech Rep.	11.157	1	2002	Netherlands	27.111
4	2009	Czech Rep.	21.627	2	2004	Netherlands	37.458
5	2011	Czech Rep.	20.58	3	2006	Netherlands	41.459
6	2013	Czech Rep.	No data	4	2008	Netherlands	52.951
1	2003	Germany	29.367	5	2010	Netherlands	46.468
2	2004	Germany	33.04	6	2012	Netherlands	45.955
3	2006	Germany	35.238	1	2002	Norway	42.292
4	2008	Germany	44.132	2	2004	Norway	56.628
5	2010	Germany	40.145	3	2006	Norway	72.96
6	2012	Germany	41.863	4	2008	Norway	95.19
1	2002	Denmark	32.344	5	2010	Norway	86.156
2	2004	Denmark	45.282	6	2012	Norway	99.558
3	2006	Denmark	50.462	1	2002	Poland	5.184
4	2008	Denmark	62.596	2	2004	Poland	6.62

[15] Source: World Bank Data was collected for the respective year of the survey for each country

5	2010	Denmark	56.486	3	2006	Poland	8.958
6	2013	Denmark	No data	4	2008	Poland	13.886
2	2004	Estonia	8.913	5	2010	Poland	12.302
3	2007	Estonia	16.393	6	2012	Poland	12.708
4	2009	Estonia	14.48	1	2002	Portugal	12.759
5	2010	Estonia	14.11	2	2005	Portugal	18.186
6	2012	Estonia	16.717	3	2007	Portugal	21.845
1	2002	Spain	16.612	4	2009	Portugal	22.019
2	2004	Spain	24.469	5	2011	Portugal	22.514
3	2006	Spain	28.025	4	2008	Romania	9.498
4	2008	Spain	34.977	3	2006	Russia	6.947
5	2011	Spain	31.473	4	2008	Russia	11.7
6	2013	Spain	No data	5	2010	Russia	10.71
1	2002	Finland	25.994	1	2002	Sweden	28.119
2	2004	Finland	36.163	2	2004	Sweden	40.261
3	2006	Finland	39.487	3	2006	Sweden	43.949
4	2008	Finland	51.186	4	2008	Sweden	52.731
5	2010	Finland	43.846	5	2010	Sweden	49.36
6	2012	Finland	45.721	1	2002	Slovenia	11.6
1	2003	France	28.794	2	2004	Slovenia	16.944
2	2005	France	33.819	3	2006	Slovenia	19.406
3	2006	France	35.457	4	2008	Slovenia	27.015
4	2008	France	43.992	5	2010	Slovenia	22.898
5	2010	France	39.186	2	2004	Slovakia	10.418
1	2002	Great Britain	27.322	3	2007	Slovakia	15.583
2	2004	Great Britain	37.095	4	2008	Slovakia	18.109
3	2006	Great Britain	40.977	5	2010	Slovakia	16.036
4	2008	Great Britain	43.78	2	2005	Ukraine	1.829
5	2010	Great Britain	36.703	3	2006	Ukraine	3.069
6	2012	Great Britain	39.093	4	2009	Ukraine	2.545
1	2003	Greece	17.494	5	2011	Ukraine	3.576

Eidesstattliche Erklärung

von

Hiermit versichere ich, dass ich die Masterarbeit – bei einer Gruppenarbeit meinen gekennzeichneten Teil der Arbeit – selbständig und lediglich unter Benutzung der angegebenen Quellen und Hilfsmittel verfasst habe.

Ich versichere außerdem, dass die vorliegende Arbeit noch nicht einem anderen Prüfungsverfahren zugrunde gelegen hat.

Ich bin damit einverstanden, dass ein Exemplar meiner Masterarbeit in der Bibliothek ausgeliehen werden kann.

Berlin, den 10.07.2014

(Unterschrift)