Analysis of Cultural Differences between Croatia, Brazil, Germany and Serbia

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In the context of globalization process and the growth of economical interdependence between countries, national culture is becoming more and more important. The paper presents comparative analysis of national cultures. Empirical research was conducted during 2012 in Croatia, Brazil, Germany, Serbia and Spain while results for Spain were used for standardization purposes. Estimated positions on the dimensions of national cultures (power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity and long versus short-term orientation) were done by using a narrow-sample strategy. The ranking of the countries from Hofstede’s original research was confirmed in all dimensions with exception of uncertainty avoidance for Croatia and Brazil. The most significant change is the move from collectivism towards individualism in Brazil, Croatia and Serbia which confirms Hofstede’s assumption about a cultural change towards individualism as a consequence of global economic growth.

Keywords: national culture, Hofstede’s methodology, Croatia, Brazil, Germany, Serbia

1. Introduction

Today, globalization is affecting all aspects of life and the world is getting more connected. In the context of globalization process and the growth of economical interdependence between countries, national culture is becoming more and more important. Interactions with other cultures happen all the time because of political, economic and social reasons. For managers living in such world it is important to be familiar with the cultural surroundings in order to better understand actions taken by the individuals and organizations that they’re dealing with and also for knowing how to appropriately behave in certain situations. Drucker (2001) uses the best and the most concise way to express the cultural impact on management, with the statement that what managers do is the same in the whole world, but how they do it can be entirely different.

Understanding culture can equip person for the challenges of contemporary international business even within the national context. Nevertheless, recognizing the importance of cultural differences helps managers understand their international partners
and competitors and ultimately helps to improve their managerial skills (Cullen and Praveen Parboteeah 2005). Understanding of cultural background decreases the chance of misunderstandings and difficulties in business and creates opportunities for understanding each other better, working together more successfully and having better results.

Modern business conditions force people to cooperate with other people “across the border”, within multicultural teams, multinational corporations and international organizations such as the World Trade Organization, the United Nations etc. In this context, it is necessary to accept and understand cultural differences in order for the cooperation among the above-mentioned participants could develop without obstacles (Tipurić, Podrug and Hruška 2007).

The reality of international business is often a confrontation with failure and difficulties which are a result of the lack of understanding of the cultural background, and not market conditions (Adler 1991). A different cultural environment requires different managerial behavior. Strategies, structures, and activities adequate for one cultural context can produce considerably different effects or even be counterproductive in some other cultural context. Therefore, strategies, structures, and activities as well as means and methods of achieving organizational goals need to be adapted to the socio-cultural environment (Francesco and Gold 2005).

National culture is affecting management and managerial activities in many ways. Sometimes that influence can be very direct and easy to notice and other times it is not so obvious and it takes a more profound understanding of a certain culture in order to see the connection (Inglehart 1997). Understanding of national culture, its elements and the effect it has on management is very important, especially today when we encounter with different cultures though activities on foreign markets, dealing with foreign partners and in general meeting with people from different countries. The purpose of this research was to identify cultural differences between Croatia, Brazil, Germany, Serbia and Spain by using Hofstede’s dimensions of national culture and to point out that knowledge about other cultures is a foundation for building good business relations based on mutual understanding.
2. National culture: dimensions and effects on management

The term culture is used frequently in many different fields of science, such as sociology, anthropology, psychology, economics and many others. The result of this is a large number of definitions of culture. Kroeber and Kluckholm (1952) define culture in the following way: “Culture consists of patterns, explicit and implicit and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture system may, on the one hand, be considered as products of action, on the other hand as conditioning elements of future action. Culture is something that is shared by almost all members of some social group; that the older members of the group try to pass on the younger members and something (as in the case of morals, laws and customs) that shapes behavior.”

Hofstede (2001) defines national culture as “the collective programming of the mind which distinguishes the members of one group or category of people from another”. The concept of a collective programming of the mind resembles the concept of *habitus* proposed by the French sociologist Bourdieu. “Certain conditions of existence produce a *habitus*, a system of permanent and transferable tendencies. A *habitus*… functions as the basis for practices and images… which can be collectively orchestrated without an actual conductor“ (Hofstede 2001). National culture is a complex concept and its’ core element are systems of values. Values are invisible until they become evident in behavior, but culture manifests itself in visible elements too. From the many terms used to describe visible manifestations of culture, the following three, together with values, cover the total concept rather neatly: symbols, heroes and rituals (Rahimić and Podrug 2013). Symbols are words, gestures, pictures and objects that carry often complex meaning recognized as such by those who share the culture. Heroes are persons, dead or alive, real or imaginary, who possess characteristics that are highly prized in a culture and this serve as models of behavior. Rituals are collective activities that are technically unnecessary to the achievement of desired ends, but that within a culture are considered socially essential, keeping the individual bound within the norms of the collectivity (Podrug 2005).
The effect that national culture has on management is probably the most visible in human relations (Miroshnik 2002). When comparing two or more national cultures it’s possible to notice differences in management, especially differences related to communication process, language usage, verbal style, nonverbal communication, conflict resolution and organizational change (Treven, Mulej and Lynn 2008). The influence of culture is also visible in international business negotiations. In different cultures there are often different views on humor and when it is appropriate to use it, a different pace of negotiations, understanding of time (monochronic or polychronic), business etiquette, decision making process (Tipurić, Podrug and Hruška 2007), attitude to hierarchy, seniority, age and professional status (Hurn 2007). The proportion of women managers varies significantly between countries (Omar and Davidson 2001) and that can also be contributed to the perception which a particular culture has about different social roles of men and women. In some cultures people prefer individual rewards, in others they prefer group rewards, there are different approaches to training and motivating employees (Schwartz 1999) etc.

In process of comparing phenomena, similarities and differences are two sides of the same coin. Nevertheless, research designs usually favor either the search for similarities or the search for differences. The distinction between a focus on similarities or differences can be fruitful combined with the distinction between levels of analysis as presented in table 1.

Table 1. near here

Studies in cells 1. and 2. (in table 1.) go across cultures, without necessarily specifying what culture stands for. They test societies as names, not as variables, and as names they are “residua of variables that influence the phenomenon being explained but have not yet been considered” (Przeworski and Teune 1970, p. 29) while studies in cells 3. and 4. focus on either similarities or differences among societies on the basis of ecological variables and their relationships. Studies in cells 3. use ecological variables to determine types or subsets of cultures that are similar among themselves but differ from other types or subsets. A typology describes a number of ideal types, each of them easy to imagine. While studies in cells 4. are concerned with determining dimensions of societies and laws at the
level of societal variables, identifying the variables that can replace the names of societies in the analysis (Hofstede 2001).

Whereas typologies are easier to grasp than dimensions, they are problematic in empirical research (Podrug 2005). Real cases seldom fully correspond to one ideal type, because most cases are hybrids. With a dimensions model, in contrast, cases can always be scored unambiguously. Therefore determining dimensions of societies was selected as proper research strategy in conducted comparative research.

Many authors in the second half of the 20th century speculated about the nature of the basic problems of societies that present distinctive dimensions of culture. Hall (1976) gave his contribution by studying the way that people in different cultures communicate and identified high context cultures and low context cultures. “Context is the information that surrounds an event; it is inextricably bound up with the meaning of that event. A high context (HC) communication or message is one in which most of the information is already in the person, while very little is in the coded, explicit, transmitted part of the message. A low context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code” (Hall 1976, p. 91). In the business world Trompenaars’s classification with seven dimensions of national culture is very popular. It includes universalism versus particularism, individualism versus collectivism, affectivity versus neutrality, specificity versus diffuseness, achievement versus ascription, time orientation and relation to nature (Trompenaars and Hampden-Turner 1998). Project GLOBE (Global Leadership and Organizational Behavior Effectiveness) gives a slightly different view with its nine cultural dimensions. Project GLOBE refers to “a worldwide, multiphase, multimethod (...) programmatic research effort designed to explore the fascinating and complex effects of culture on leadership, organizational effectiveness, economic competitiveness of societies, and the human condition of members of the societies studied” (House et al. 2004, p. 10-11). On the basis of an empirical research of 500 different organizations and 62 societies, 9 dimensions have been surveyed including power distance, uncertainty avoidance, social collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation and humane orientation (House et al. 2004).
Hofstede’s dimensions of national culture lead by the number of quotes and by importance in the field of cross-cultural management (Sondergaard, 1994.). Hofstede was working as a leading researcher in IBM’s office for Europe. He carried out a research in the period from 1967 to 1969, with more than 60 000 respondents, employees in IBM’s subsidiaries in 53 countries (Podrug 2005, p. 30). The research was repeated in 71 countries in the period from 1971 to 1973 with a modified questionnaire and 60 000 respondents (30 000 respondents from the first research, 20 000 respondents recently employed in IBM, and 10 000 respondents who did not participate in the first research). By factor analysis Hofstede defined four factors, that is, four dimensions of national culture: (1) power distance, (2) uncertainty avoidance, (3) individualism/collectivism and (4) masculinity/femininity; the fifth dimension was added later – long-term versus short-term orientation – as a result of Hofstede and Bond’s joint effort.

Power distance dimension measures “the extent to which less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede 2001). Management styles in high power distance countries like Guatemala, Venezuela and India tend to be autocratic and paternalistic; organization pyramids are usually tall with close organizational control (Hofstede 2001). In countries with low power distance like Austria, Denmark and Israel management styles are more participative and organizations are flatter (Hofstede 2001).

Uncertainty avoidance dimension measures “the extent to which the members of a culture feel threatened by uncertain and unknown situations” (Hofstede 2001). The basic problem involved is the degree to which a society tries to control the uncontrollable (Bik 2010, p. 74). Organizations in countries with high uncertainty avoidance tend to formalize rules and procedures to ensure that individuals know what to do in a given situation (Murphy 2003, p. 80). Individuals with high uncertainty avoidance are concerned with security in life, feel a greater need for consensus and written rules, are less likely to take risks while individuals in low uncertainty avoidance societies are less concerned with security, rules and they are more risk tolerant (Hofstede 1980). Individuals in countries with lower uncertainty avoidance scores tend to rely more on their own initiative and decision-making ability than on formal rules and procedures (Murphy 2003). Examples of
high uncertainty avoidance countries are Greece, Portugal and Japan while low uncertainty avoidance exists in Jamaica, Sweden and Ireland (Hofstede 2001).

The third dimension of national culture has two opposite poles, individualism and collectivism. Individualism stands for “a society in which the ties between individuals are loose – everybody is expected to look after him/herself and his/her immediate family only” while collectivism stands for “a society in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (Hofstede 2001). Individuals from countries with high individualism scores tend to place a high value on personal autonomy, self-sufficiency and individual financial security while individuals from countries with low individualism scores (high collectivism) tend to place a high value on group affiliation (Murphy 2003). Some of the countries more oriented towards individualism are Australia, Canada and Italy while Ecuador, Pakistan and Thailand are more oriented towards collectivism (Hofstede 2001).

The fourth dimension is masculinity/femininity. Masculinity represents a society in which social gender roles are clearly distinct – men are supposed to be assertive, tough and focused on material success while women are supposed to be modest, tender and concerned with the quality of life. Femininity represents a society in which social gender roles overlap, meaning that both men and women are supposed to be modest, tender and concerned with the quality of life (Hofstede 2001). In high masculinity countries such as Japan, Germany and the USA, people are more assertive and show less concern for individual needs and feelings, a higher concern for job performance and a lower concern for the quality of the working environment while in countries high on the feminine dimension such as Sweden and Norway, working conditions, job satisfaction, and employee participation are emphasized (Treven, Muley and Lynn 2008).

These four national culture’s dimensions were later extended by the fifth, which is called long-term versus short-term orientation - originally, called Confucian dynamism (Hofstede and Bond 1984). It refers to the extent to which a culture programs its members to accept delayed gratification of their material, social, and emotional needs (Bik 2010, p. 75). “Long-term orientation stands for the fostering of virtues oriented towards future rewards, in particular perseverance and thrift. Short-term orientation stands for the fostering
of virtues related to the past and present, in particular, respect for tradition, preservation of “face” and fulfilling social obligations” (Hofstede 2001, p. 359). “In countries with long-term orientation, planning has a longer time horizon. Companies are willing to make more substantial investments in employee training and development, there will be longer-term job security, and promotions will come slowly” (Treven, Mulej and Lynn 2008, p. 30). Some of the long-term oriented countries are China, Japan and South Korea while Pakistan, Canada and the USA are more short-term oriented (Hofstede 2001).

Values of selected national culture’s dimensions from the original Hofstede’s research are shown in table 2.

Table 2. near here

The initial research question was whether national culture, mostly viewed via national culture’s dimension, influences or not on different aspects of management. Hofstede’s research and other studies (for instance, Bhagat et al. 1990) seem to have put an end to this question, at least as a broad interrogation. However, this question remains in actuality when is applied to specific segment, like cultural change that is in focal interest of this research. National cultures are stable over time, but external changes, in form of forces of nature or forces of human beings (like trade, conquest, economic or political dominance and technological breakthroughs) play an important role in culture change. In the comparative literature one may find the “convergence hypothesis” which implies that management philosophies and practices around the world are becoming more and more alike. Therefore, the main objective was to identify cultural changes and to verify the movement towards cultural convergences.

3. Methodology and interpretation of results

Designs in international and cross-cultural management research are understandably complex (Usunier 1998). The diversity of management, cultural and context variables to be taken into account makes them complex to conceive and as a result, this complexity has to be under control both at the conceptual and data collection levels. Replications are very popular kind of study which offers the ease of having a preset design (for example, original Hofstede’s research) and require only a new round of research implementation including
new data collection. This research as well has relevant replication component that needs to be recognized, but also identifies cultural changes and convergence processes.

The research was conducted in five countries (Croatia, Brazil, Germany, Serbia and Spain) and the instrument used was the Value Survey Module 1994 (VSM 1994). This instrument was defined by the Institute for Research on Intercultural Cooperation (IRIC) and it is a modified version of the questionnaire used in the original Hofstede’s research. It was especially developed for the replications’ purposes. One request made by this VSM version was that it should also be relevant to respondents without employers, such as entrepreneurs and students (Hosfede 2001).

Spain and Brazil are the only two countries which participated in the original research. Germany was then divided into West Germany and East Germany, and only West Germany was included in the research. Croatia and Serbia were also included in the research but they were a part of former Yugoslavia at that time. In Yugoslavia the research was carried out not in IBM, but in Intertrade which was an enterprise responsible for marketing and servicing IBM’s products. When former Yugoslavia fell apart, correction of the collected data was made in order to determine values for dimensions of national culture for Slovenia, Croatia and Serbia separately.

The VSM 94 contained 20 content questions plus the 6 demographic questions covering gender, age, years of formal education, type of occupation, nationality and nationality of the birth. Four questions were needed to calculate each dimension score. The index formulas were as follows in table 3.

Table 3. near here

The VSM is a test designed for comparing mean scores for matched samples of respondents across two or more countries, regions, or ethnic groups. It is not a personality test for comparing individuals within countries. Therefore, Cronbach alpha reliability coefficients across individuals are irrelevant (Hofstede 2001, p. 497.). An unreliable test cannot produce valid results, so if validity is proven, reliability can be assumed. Validity is shown through significant correlations of test results with outside criteria related to the test scores by some kind of theory or logic. In his way the reliability of the VSM, even for smaller number of countries, can be proven indirectly (Hofstede and Hofstede 2005, p. 28.).
There are three different kinds of research possibilities: 1. survey studies of other narrow but matched samples of populations, such as university students, 2. representative sample polls of entire national populations and 3. characteristics of countries directly measured at the country level (Hofstede 2001, p. 67.). As stated earlier, narrow sample was chosen as optimal research option for this cross-cultural analysis. Sample description is presented in table 4.

Table 4. near here

Absolute scores do not mean anything at all, only differences between the scores from at least two countries can be interpreted and compared to the IBM database, and this only if the samples are sufficiently large (at least 20-50 per country) and sufficiently matched from country to country (that is similar in all relevant aspects except nationality) (Hofstede and Hofstede 2005). As presented in table 4. all of the methodological prerequisites were fulfilled.

Furthermore, “standardization” is the next requirement for the interpretation and comparison of comparative cultural research (Kolman et al. 2003; Nasierowski and Mikula 1998). Standardization must be done so that the values can be compared to the original Hofstede’s research and interpreted in the right manner. The country used for standardization purposes must be one of the countries from the original research so that the original values for each dimension can be compared to the calculated values in this research. Spain was used for this purpose. Uncalibrated values for Croatia, Brazil, Germany and Serbia are shown in brackets in table 5.

Calculated values for Spain are:

- power distance index: 35.67
- uncertainty avoidance index: 75
- individualism/collectivism index: 79.67
- masculinity/femininity index: 61.33
- long-term versus short-term orientation index: 31.33

These calculated values are then compared to the results for Spain from the original Hofstede’s research. In that way the correction factors for each dimension are calculated. For example, the original value of the power distance index for Spain is 57 and in this
research the calculated value is 35.67. This means that the correction factor for power distance index is 21.33. This correction factor is then applied for correction of other countries’ values. Uncalibrated values are turned into calibrated values and presented in table 5.

Calculated correction factors are:

- correction factor for power distance index: + 21.33
- correction factor for uncertainty avoidance index: + 11
- correction factor for individualism/collectivism index: – 28.67
- correction factor for masculinity/femininity index: – 19.33
- correction factor for long-term versus short-term orientation index: – 12.33

The highest power distance index is calculated for Serbia, then Croatia, Brazil and the lowest for Germany. The countries’ ranking corresponds to the original research presented in table 2. Hofstede and Hofstede (2005) noticed a global trend towards lower power distance which correlates with the growth of GDP. Compared to the original research, PDI values have decreased for Croatia, Serbia and Brazil, but the ranking has remained the same. The highest uncertainty avoidance is in Serbia, then in Brazil, Croatia and the lowest in Germany. Compared to the original research, uncertainty avoidance index decreased, but the ranking is also very similar. Exception is identified for Brazil and Croatia but the changes are relatively minor from the original research. Hofstede (2001) points out that the explanation of the values of uncertainty avoidance dimension lies in the historical and religious context. Rather high uncertainty avoidance values in Croatia and Serbia can be attributed to inheritance of a communist regime which is characterized by the emphasis on equality and safety (Podrug 2005, p. 129). Hofstede also claims that “young democracies” always have high uncertainty avoidance which also applies to Croatia and Serbia. Brazil also has an interesting and a rather turbulent past, especially in the 20th century so that certainly must have affected the uncertainty avoidance dimension. These results are consistent with Hofstede’s conclusion that high uncertainty avoidance is related to Catholic and Orthodox Church, Islam and Judaism.
The results for the dimension individualism/collectivism, show that Germany expresses the highest tendency towards individualism which is followed by Brazil, Croatia and Serbia with similar index values. In the 1970’s these countries were oriented towards collectivism while in nowadays their shift towards individualism is quite significant. These results are connected with research question and they confirm “convergence hypothesis”. Furthermore, the results verify the influence of global economic growth on the dimension and movement towards individualism. The ranking of all four countries remained unchanged over time. Calculated values of masculinity/femininity dimension show that Germany is the most masculinity oriented of these four countries. It is followed by Brazil, then Serbia and Croatia. The only significant difference from the original Hofstede’s research is a higher value of the index for Brazil which is close to the calculated value for Germany. Partial explanation may be found in the sample characteristics due to the fact that Brazil had more male respondents in the sample (57%) and therefore Brazil showed higher tendency towards masculine values.

The fifth dimension, long-term/short-term orientation is very interesting because it wasn’t a part of Hofstede’s original study. This research identified short-term orientation, most of all for Croatia, followed by Serbia, Germany and Brazil. The ranking between Germany and Brazil stayed unchanged although in the past Brazil used to be more long-term oriented compared to nowadays.

The research managed to show cultural similarities and differences between the countries through Hofstede’s five dimensions of national culture. When comparing the results with the original research, it’s interesting to see that the ranking of the countries has remained very similar. The significant change was in the uncertainty avoidance dimension where Brazil and Croatia switched places, but still have very similar index values. The research question of identifying cultural changes was accomplished: the most significant cultural change is the shift towards individualism as well as the trend towards lower power distance.

4. Conclusion

Internationalization of business has resulted in a stronger need for understanding other cultures, why their members behave in a certain way and how the culture is affecting their
business practices. Understanding and accepting national culture with its values, beliefs, attitudes and forms of behavior is a prerequisite for the comparison of national and international business practice, expansion on foreign markets, acquisition of knowledge and skills on which the success of an individual or organizations are based. Therefore managers have to be aware of the cultural surrounding so that they could avoid misunderstandings which could lead to the loss of markets and business. Cultural researches are always interesting and important because they expand horizons and provide new knowledge that can be applied in practice. This leads to mutual understanding and respect between the members of different cultures and to more successful business cooperation and better results.

Research about the development of cultural values has shown repeatedly that there is little evidence of international convergence over time, except of individualism for countries having become wealthier. Value differences between nations described by authors centuries ago are still present today, in spite of continued close contacts. For the next few hundred years at least, countries will remain culturally diverse. Therefore, conclusions from this paper may be helpful for understanding managerial activities, sources and consequences of different practices and principles in the analyzed countries.

Many scientists have tried to contribute to the discovery of objective criteria by which national cultures differ. Most of the past comparative cultural researches, including this research, use country as a surrogate for culture. In many cases there are numerous cultures within one country which means that precise identification of the cultural differences is not the same as country differences. A good example of this is Brazil with a population of over 190 million people and many different ethnic groups with different cultures. So it may be worthwhile for future research to be conducted on the level of ethnic groups.

Additional limitation is how to control the variance in the data, so that it can really be attributed to cultural differences. The risk is to compare individuals rather than nations/cultures. The national culture questionnaire is not a reliable personality test. For example, the country score for uncertainty avoidance are based on three questions (stress, rule orientation and intent to stay in the company) and at the country level these three are strongly correlated. But for individuals these questions are not correlated in the same way.
There is positive correlation between rule orientation and intent to stay, but there is no
correlation between stress and rule orientation.

Data collection is a limitation for cross-cultural research and there is no ideal
method and it is probably impossible to describe phenomena in their full complexity. In
fact there are no easy data collection procedures when applied cross-culturally since
interviews, questionnaires, participant observations will all face the barrier of language, and
problems of cross-national or cross-cultural comparability of data.

Optimal international management research should be the combination of
quantitative and qualitative research methods, with awareness of confronting different sorts
of biases and prejudices rather than making language-free, prejudice-free, context-free and
supposedly bias-free research.

Cross-cultural research in management serves the purpose of creating unique and
new insights and generating broader concepts, rather than simple comparison. Therefore,
some topics would also deserve better coverage such as research about cross-cultural
interactions, cultural intermediation, cultural mediation, intercultural competence in
broader perspective than basic adjustment. Cross-cultural research should also focus on
unlearning as well as learning processes. Cross-cultural research should also focus on
extreme rather than average situations because non-average behaviors are interesting
because the central tendency may only be the result of people not daring to do what other
people allow themselves. There are many other interesting research topics, for example the
study of cultural distance in foreign entries, affecting both the choice of entry mode and the
rate of success. Yet there are no simple and uniform rules that can be generalized across
countries, industries and points in time.

References
Adler, N. (1991). *International Dimensions of Organizational Behavior* (2nd ed.). Belmont,
CA: Wadsworth Publishing Company.

Bhagat, R. S., Kedia, B. L., Crawford, S. E., & Kaplan, M. R. (1990). Cross-cultural issues
in organizational psychology: emergent trends and directions for research in the 1990s. In:
Cooper, C. L., & Robertson, I. (Eds.), *International Review of Industrial and
Organizational Psychology* (pp. 59-99). Chichester, UK: John Wiley.
Bik, O. P. G. (2010). The behavior of assurance professionals: A cross-cultural perspective. Delft: Eburon.

Cullen, J. B., & Praveen Parboteeah, K. (2005). Multinational Management: A Strategic Approach (3rd ed.). Mason, Ohio: Thomson South-Western.

Drucker, P. (2001). Management Challenges for the 21st Century. New York: Harper.

Francesco, A. M., & Gold, B. A. (2005). International organizational behavior: text, cases, and skill (2nd ed.). New Jersey: Pearson Prentice Hall.

Hall, E. T. (1976). Beyond culture. Garden City, NY: Anchor.

Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values (Abridged ed.). Newbury Park, CA: Sage.

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations (2nd ed.). Thousand Oaks, CA: Sage.

Hofstede, G., & Bond, M. H. (1984). Hofstede's culture dimensions: An independent validation using Rokeach's value survey. Journal of Cross-Cultural Psychology, 15, 417-433.

Hofstede, G., & Hofstede, J. G. (2005). Culture and Organizations: Software of the Mind (2nd ed.). New York: McGraw-Hill.

House, R. J., Hanges, P. J., Javidan, M., Dorfmann, P. W., & Gupta, V. (2004). Culture, Leadership and Organizations: The GLOBE Study of 62 Societies. Thousand Oaks, CA: Sage.

Hurn, B. J. (2007). The influence of culture on international business negotiations. Industrial and commercial training, 39, 354-360.

Inglehart, R. (1997). Modernization and postmodernization: Cultural, economic and political change in 43 societies. Princeton, NJ: Princeton University Press.

Kolman, L., Noorderhaven, N. G., Hofstede, G., & Dienes, E. (2003). Cross-cultural differences in Central Europe. Journal of Managerial Psychology, 18, 76-88.

Kroeber, A. L., & Kluckholm, C. (1952). Culture: A Critical Review of Concepts and Definitions. Boston, MA: Harvard University Press.

Miroshnik, V. (2002). Culture and international management: a review. Journal of Management Development, 21, 521-544.
Table 1. Research designs for comparative multi-society studies

| Focus on similarities between societies | Focus on differences between societies |
|----------------------------------------|----------------------------------------|

Murphy, D. S. (2003). Management Control Preferences: A Cross-Cultural Perspective. *Management Research News, 26*, 78-95.

Nasierowski, W., & Mikula, B. (1998). Culture Dimensions of Polish Managers: Hofstede's Indices. *Organization Studies, 19*, 495-509.

Omar, A., & Davidson, M. J. (2001). Women in management: A comparative cross-cultural overview. *Cross Cultural Management: An International Journal, 8*, 35-67.

Podrug, N. (2005). *The influence of national culture's dimensions on decision-making style* (Unpublished master thesis). University of Zagreb, Zagreb.

Podrug, N. (2011). Influence of National Culture on Decision-Making Style. *South East Journal of Economics and Business, 6*, 37-44.

Przeworski, A., & Teune, M. (1970). *The logic of comparative society inquiry*. New York: John Wiley.

Rahimić, Z., & Podrug, N. (2013). *Međunarodni menadžment*. Sarajevo: Ekonomski fakultet Sarajevo.

Søndergaard, M. (1994). Hofstede’s Consequences: A study of reviews, citations and replications. *Organization Studies, 15*, 447-456.

Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review, 48*, 23-47.

Tipurić, D., Podrug, N., & Hruška, D. (2007). Cultural Differences: Results from Empirical Research Conducted in Croatia, Slovenia, Bosnia and Herzegovina and Hungary. *The Business Review, Cambridge, 7*, 151-157.

Treven, S., Mulej, M., & Lynn, M. (2008). The impact of culture on organizational behavior. *Management, 13*, 27-39.

Trompenaars, F., & Hampden-Turner, C. (1998). *Riding the waves of culture: Understanding cultural diversity in global business* (2nd ed.). New York, NY: McGraw-Hill.

Usunier, J.-C. (1998). *International and Cross-Cultural Management Research*. London: Sage Publication.
Concerned with micro-level variables within society (culture as black box) 1. Prove university of micro-level laws 2. Illustrate uniqueness of each society

Concerned with ecological variables between society (culture specific) 3. Determine types or subsets of societies 4. Determine dimensions of societies and macro-level laws

Source: Hofstede, G., (2001), *Culture’s Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, Second Edition, (Thousand Oaks, CA: Sage), p. 27.

Table 2. Values of national culture’s dimensions from the original Hofstede’s research

| Dimension                        | CROATIA | SERBIA | GERMANY | BRAZIL | SPAIN |
|----------------------------------|---------|--------|---------|--------|-------|
| Power distance index (PDI)       | 73      | 86     | 35      | 69     | 57    |
| Uncertainty avoidance index (UAI)| 80      | 92     | 65      | 76     | 86    |
| Individualism/collectivism index (IND)| 33 | 25     | 67      | 38     | 51    |
| Masculinity/femininity index (MAS)| 40     | 43     | 66      | 49     | 42    |
| Long-term/short-term orientation index (LTO)| unknown | unknown | 31     | 65     | 19    |

Source: Hofstede, G. and Hofstede, J. G., (2005), *Culture and Organizations: Software of the Mind*, Second Edition, (New York: McGraw-Hill) p. 43-44, 78-79, 120-121, 168-169, 210-211.

Table 3. Dimensions’ formulas

| Dimension                        | Calculation (m = mean; for example, m (03)= mean score for question 03)                                                                 |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Power distance index (PDI)       | - 35 × m (03) + 35 × m (06) + 25 × m (14) – 20 × m (17) – 20                                                                           |
| Uncertainty avoidance index (UAI)| 25 × m (13) + 20 × m (16) – 50 × m (18) – 15 × m (19) + 120                                                                            |
| Individualism/collectivism index (IND)| - 50 × m (01) + 30 × m (02) + 20 × m (04) – 25 × m (08) + 130                                                                     |
| Masculinity/femininity index (MAS)| 60 × m (05) – 20 × m (07) + 20 × m (15) – 70 × m (20) + 100                                                                          |
| Long-term/short-term orientation index (LTO)| - 20 × m (10) + 20 × m (12) + 4                                                                                                         |

Source: Hofstede, G., (2001), *Culture’s Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, Second Edition, (Thousand Oaks, CA: Sage), p. 494-497.

Table 4. Sample description

| | Number of respondents | Number of respondents, % |
|----------------------------|------------------------|--------------------------|


| Gender     | male | 59  | 34.70% |
|------------|------|-----|--------|
|            | female | 111 | 65.30% |
| Age        | under 20 | 0  | 0%     |
|            | 20-24  | 133 | 78.20% |
|            | 25-30  | 37  | 21.80% |
|            | over 30 | 0  | 0%     |
| Educational level | undergraduate | 154 | 90.60% |
|            | graduate | 16  | 9.40%  |
|            | postgraduate | 0  | 0%     |
|            | other | 0  | 0%     |
| Work position | non-managerial positions | 54  | 31.80% |
|            | lower level management | 9   | 5.30%  |
|            | middle level management | 2   | 1.20%  |
|            | top management | 0  | 0%     |
|            | others | 105 | 61.70% |
| Country    | Croatia | 44  | 25.90% |
|            | Serbia  | 34  | 20%    |
|            | Spain   | 30  | 17.60% |
|            | Germany | 32  | 18.80% |
|            | Brazil  | 30  | 17.60% |
| Total      | 170  | 100% |

Source: Authors.

Table 5. Calibrated (uncalibrated) positions of the countries on Hofstede’s dimensions

|                           | CROATIA       | SERBIA       | GERMANY      | BRAZIL       |
|---------------------------|---------------|--------------|--------------|--------------|
| **Power distance index (PDI)** | 67.01 (45.68) | 73.24 (51.91) | 41.8 (20.47) | 57 (35.67)   |
| **Uncertainty avoidance index (UAI)** | 65.20 (54.20) | 76.29 (65.29) | 50.06 (39.06) | 67.83 (56.83) |
| **Individualism/collectivism index (IND)** | 55.19 (83.86) | 53.54 (82.21) | 69.30 (97.97) | 55.33 (84)   |
| **Masculinity/femininity index (MAS)** | 48.62 (67.95) | 50.67 (70) | 67.55 (86.88) | 64.34 (83.67) |
| **Long-term/short-term orientation index (LTO)** | 25.85 (38.18) | 32.38 (44.71) | 37.67 (50) | 43 (55.33)   |

Source: Authors.