Preliminary communication

UDC 65.012.4: 339.137.2

The impact of the EU accession process to the organizational culture of the companies operating in the transition countries* 1

Goran B. Andjelic2, Valentina Ivanic3, Vladimir Dj. Djakovic4

Abstract

The aim of this research is to reveal the direction of change the cultural dimensions of companies in AP Vojvodina, when the Republic of Serbia – as a country in transition – was being included in the European division of labor. Foreign direct investments from EU countries are used as a method of transposing cultural patterns. The research methodology used here included the application of the Mann Whitney and the Chi square tests to compare the attitudes of the managers of these two groups of companies in AP Vojvodina. The results indicate that there is no statistically significant difference in the attitudes of managers of the two groups of companies, in terms of the questionnaire items that explore the power distance dimension. In AP Vojvodina, masculinity and individualism are still valued to a greater extent by the managers of companies with foreign capital than by those with domestic capital. Managers of the companies with foreign capital show a higher degree of uncertainty avoidance than those with domestic capital, which is contrary to authors’ expectations, though explicable in the context of the recessionary business conditions under which the research was conducted.

Key words: organizational culture, competitiveness, transition countries

JEL classification: A12, D23, M14, P27

* 1 Received: 14-07-2012; accepted: 14-12-2012

The authors acknowledge the financial support of the Ministry of Education, Science and Technological Development of the Republic of Serbia, within the Project No. 47028, and of the Centre for Strategic Economic Studies “Vojvodina-CESS”, Novi Sad, Republic of Serbia.

2 Associate Professor, Educons University, Faculty of Business in Service, Vojvode Putnika bb, Sremkska Kamenica, Republic of Serbia. Scientific affiliation: financial management, investment management, strategic management. Phone: +381 21 489 3639. Website: http://www.educons.edu.rs. E-mail: andjelic1975@gmail.com.

3 MSc, Agency for balanced regional development of the AP Vojvodina, Mite Ružića 2, Novi Sad, Republic of Serbia. Scientific affiliation: regional development, organizational culture and management. Phone: +381 63 589 555. Website: http://www.vojvodina-cess.org. E-mail: v.ivanic@vojvodina-cess.org (corresponding author).

4 Teaching Assistant, University of Novi Sad, Faculty of Technical Sciences, Trg Dositeja Obradovića 6, Novi Sad, Republic of Serbia. Scientific affiliation: production systems, organization and management (investment management). Phone: +381 21 485 2190. Website: http://www.fin.uns.ac.rs, http://www.iim.fin.uns.ac.rs/. E-mail: v_djakovic@uns.ac.rs.
1. Introduction

The subject of this research is analysis of the dimensions of organizational culture (power distance, uncertainty avoidance, individualism versus collectivism, feminine versus masculine values) as factors of company’s competitiveness in a certain region (AP Vojvodina) of a country, which was in transition (Republic of Serbia) at the time of its inclusion in the European division of labor. The theoretical and methodological basis of this research is the Hofstede comparative research of national cultures in which the former Socialist Federal Republic of Yugoslavia (SFRY) was also included. The Hofstede model of national cultures was applied to this study to explore the organizational cultures of companies in AP Vojvodina during the accession of the Republic of Serbia to the European Union. The definition of culture by Hofstede allows the application of this concept both to nations and regions, as well as to companies. Culture is defined as “a collective programming of the mind which distinguishes members of one group or category of people from another” (Hofstede, 2001:9), and the culture of organization as a “collective programming of the mind which distinguishes members of one organization from another” (Hofstede and Hofstede, 2005:282).

The objective of this research is to reveal and understand the movements (divergence or convergence) of some cultural dimensions (power distance, attitude toward uncertainty, individualism versus collectivism, feminine or masculine values) of the two groups of companies in AP Vojvodina – i.e. those operating with private capital of foreign or domestic origin. In order to obtain scientifically verified findings about the divergence or convergence of the cultural dimensions of companies (that operate with different forms of ownership in AP Vojvodina), the degree of acceptance by the managerial subculture of companies has been measured as to serve as a tool for maintaining their competitive advantages.

For the purpose of understanding the implications of the foregoing observations on the economic life in general, it is important to consider the ways in which Hofstede defines each of the four dimensions of national culture (power distance, uncertainty avoidance, individualism versus collectivism, feminine versus masculine values). Furthermore, he defines power distance as a dimension that indicates “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede, 2001:98). According to him, uncertainty avoidance indicates “the extent to which the members of a culture feel threatened by uncertain or unknown situations.” (Hofstede, 2001:161). His hypothesis is that, in cultures with high uncertainty avoidance, organizations will reduce uncertainty through administrative control and by standardization and formalization of roles. While feminine societies he defines as “societies in which social roles overlap and in which both men and women should be modest, careful and ensure the quality of life”, masculine societies are...
defined as those in which gender roles are distinct and “men are supposed to be assertive, be tough, and focus on material success; women are supposed to be more modest, tender, and concerned with the quality of life.” (Hofstede, 2001: 297). The culture of the Republic of Serbia, according to Hofstede’s findings, is collectivistic; collectivism defined as follows: “Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetimes continue to protect them in exchange for unquestioned loyalty” (Hofstede, 2001: 225)

In the case of AP Vojvodina, most investors come from cultures which, according to Hofstede’s dimensions, differ from the culture of the Republic of Serbia, namely the culture of AP Vojvodina. In this research, the starting assumption is that the culture of AP Vojvodina is no different from the culture of the Republic of Serbia. According to the authors’ findings, no research has yet been conducted on the cultures of certain regions in the Republic of Serbia, and this is the first research of its type.

For the period 2001-2009, the total net FDI (foreign direct investments) of AP Vojvodina amounted to 4.8 billion Euros. No consensus can be seen in the available references on the existence of dimensions of European culture. But, looking at the structure of FDI in AP Vojvodina, in terms of the countries of capital’s origin it can be seen that the dimensions of these countries are divergent in relation to the cultural dimensions of the Republic of Serbia (Table 2). The structure of FDI in AP Vojvodina shows that over 50% of investments were from Italy (17%), Belgium (12%), Germany (12%) and France (10%) (Ivanić et al., 2011: 35).

The research results will benefit the academic and professional community, not only in the Republic of Serbia, but also in other countries in transition. They would also be helpful for developing cultural orientation programs for the countries in transition. In addition, the results will be of a great benefit not only to the existing but also to the potential investors in AP Vojvodina, especially in selecting and managing the local labor force. Moreover, they will also be useful to local owners of medium-sized companies who intend to internationalize their businesses. The research results will also be helpful to the Government of the Republic of Serbia in formulating a policy that makes small and medium-sized companies more competitive.

Based on the foregoing observations, the following hypothesis can be set: organizational culture of the companies that operate with private capital of foreign origin in AP Vojvodina is characterized by lower power distance, lower uncertainty avoidance, individualism and masculine values as opposed to the organizational culture characterized by higher power distance, higher uncertainty avoidance, collectivistic and feminine values typical for the companies that operate with private capital of domestic origin in AP Vojvodina.
In the following sections, an overview of relevant literature will be presented, followed by the methodology adopted for studying the samples, focusing both on theoretical and empirical implications. In the end, the research results, and a discussion on them will be presented, followed by conclusions and recommendations for future research. Finally, the list of the references cited in the paper is presented.

2. Literature review

Many researchers (Deal and Kennedy, 1982; Peters and Waterman, 1982; Wilkins and Ouchi, 1983; Denison, 1984; Kotter and Heskett 1992; Porter, 1998; Hofstede, 2001) stressed the importance of cultural dimensions as factors in achieving both micro-and macro-competitiveness. National cultures largely determine the cultures of organizations, which is a significant factor in the competitiveness of any organization (Denison and Mishra, 1995).

Transition countries, during their accession to the EU, were exposed to institutional convergence and a value convergence, and it is the latter that determines their competitiveness. “A group of European and American social scientists argue that Hofstede’s cultural dimensions affect key aspects of the transformation processes in Eastern Europe, such as EU integration, the adoption of the acquis communautaire and the implementation of NPM inspired reforms” (Eriksen, 2007; 342). In his article on “cultural roots of economic performance”, Hofstede (1991) contends that cultural values, rather than differences in material and structural conditions, are the ultimate determinants of any economic growth.

The competitiveness of companies in transition countries has become an interesting topic only after the opening of the markets in question and their integration into international economic flows (Ardichvill and Kuchinke, 2002). The integration resulted in proliferation of the studies dealing with specific development characteristics of those economies: “also, compared with the developed markets, emerging markets are characterized by reforms of the financial markets, frequent internal and external financial shocks, high level of country risk, changes of the credit rating, the fluctuation of foreign currency courses, high level of insider trading, etc.” (Anđelić et al, 2010: 3667). One way of improving competitiveness of companies in transition countries is to improve their receptivity for foreign direct investments through capacity to manage the cultural distance costs (Kogut and Singh, 1998; Madhok, 1997; Uhlenbruck and De Castro, 2000; Meyer and Estrin, 2001). Research carried out in transition countries (Mcintyre and Dallago, 2003; Richard Scase, 2003) points to the fact that the development of a competitive sector of medium-sized companies in transition countries is the precondition of their internationalization, which depends to a large extent on the development of their
organizational culture. Power distance as a dimension of organizational culture will determine organizational growth and governance issues; uncertainty avoidance through standardization of roles affecting the transaction costs (based on trust in external and internal communication) and ability to innovate; feminine values will determine social corporate responsibility and individualistic dimension will be of crucial importance for “learning companies.”

Research in the field of national and organizational cultures and their impact on the competitiveness of companies is rare in the Republic of Serbia. Only after 2000, when the processes of ownership transformation and foreign direct investment attraction began, did the researchers begin to address the dimensions of the national culture (Janićijević, 1997) and start to pay attention to the impact of culture on management leadership styles in the Republic of Serbia (Mojić, 2003), human resources in the domain of transition economies (Bogićević Milikić and Janićijević, 2009), and the study of cultural distance as a factor of competitiveness of multinational companies in the Republic of Serbia (Mojić, 2010). In the transition of socialist economies to market economy, the role of companies also changed from “a social role to economic agents” (Lelkes, 2006). The SMEs are more reactive than proactive (Lages and Montognery, 2004); they have neither the experience in working with foreign markets, nor the labor force that could acquire such experience (Welch and Loustarinen, 1988, Eriksson et al.1997; Coviello and McAuley, 1999).

The development of dynamic and competitive sector of medium enterprises in countries in transition is the precondition of their internationalisation. Understanding of the importance and role of certain dimensions of organizational culture in each phase of their growth and development is another important factor for the development of competitive sector of medium enterprises in countries in transition. Competitiveness of companies of the developed economies rests on their capacity to develop “non-price competitiveness“. Factors of non-price competitiveness of companies are based on quality of their products and services, design, standardisation, capacity for innovations, as well as capacity to apply modern technologies. Organizational culture is an important factor of non-price competitiveness since it affects both the innovativeness of companies and technological receptiveness, and finally acquiring and maintaining of competitive advantage of companies via the management style, company’s organizational design, and formalisation and standardisation process in a company.

Janićijević found that the owners in companies in Serbia, hold a tight personal control over all activities unwilling to delegate any authority to professional managers “which represents the main barrier for further organizational growth for their firms” (Janićijević and Bogićević Milikić, 2009:178). Low power distance is a sign of founder’s willingness to set up and diversify the managerial structure within a company, as well as to move on from the power culture onto the task culture.
The need of foreign investors for a cultural ‘due diligence’ is becoming increasingly important when investing in transition countries. Furthermore, “the importance of cultural due diligence in mergers, acquisitions and alliances has given rise to a need for cultural corporate due diligence (Carleton, 1997) that is equally important as a part of the overall investigation of a target as traditional legal and financial due diligence.”(Bertoncelj and Kovač, 2007:176). Cultural due diligence is very important for international companies in order to maintain non-price competitiveness: “International companies could benefit by collecting innovations from low uncertainty avoidance subsidiaries and developing them in high uncertainty avoidance subsidiaries.” (Hofstede, 2001:167). Cultures with a low level of uncertainty avoidance are considered suitable for the development of entrepreneurship and innovations and this dimension is therefore used as the predictor for innovations capacity of a nation, namely region, as well as the predictor for building non-price competitiveness of companies. In countries and companies with high uncertainty avoidance innovations are more difficult to bring about, but once innovations are accepted in that countries and companies, they are taken more seriously than in countries and companies with low uncertainty avoidance.

As the values of individualism are the values that get expressed at a certain level of social and economic development, it can be expected that this dimension of organizational culture of companies from the AP Vojvodina operating with private capital of domestic origin will be affirmed after they become aware that investments in creating of culture of innovations are profitable investments rather than expenditures.

The convergence of management practices is the result of globalization processes, which leads not only to institutional convergence, but also to the convergence of the system of values (Vertinsky et al., 1990). The “convergence hypothesis” is supported by Harbison and Myers who claim that “there is a general logic of management development, which has its applicability in both developed and in developing countries” (Harbison and Myers,1959: 117). In the context of the debate on convergence, Bogičević et al. observed that “We also believe that the transition processes – through the introduction of market mechanisms and systems, congruent with strong individualism, low power distance, masculine values and low levels of risk aversion – will lead to changes in the national culture of Serbia towards the lower level of uncertainty avoidance, lower levels of collectivism and in rise of masculine values.” (Bogičević et al., 2009:175). Many researchers agree that economic reforms in transition countries are not possible without paying attention to cultural values (Kostera and Wicha, 1995; Verder 1996; Czarniawska, 2001; Kelemen and Kostera, 2002; Zweynert and Goldschmidt, 2005; Manea and Pearce, 2004). Boslelović (2005) notes that in countries in transition, formation of a new class of managers can be expected, whose role is undeniable when it comes
to the process of transformation of the value system. At the end it is necessary to emphasize the fact that the research was conducted in conditions of recession that made it particularly challenging owing to the fact that recession and post-recession conditions for doing business affected not only changes in management practices, but also indicated the need for changes in the ruling paradigm of economic development manifested in all the more emphasised orientation towards feminine values.

3. Methodology

Starting with the available research data, which was measured on ordinal scale, appropriate non-parameter statistical tests were used for their analysis. All hypotheses were tested with the significance level of 5% (p=0.05). For data analyses, SPSS 19.0 (Statistical Package for the Social Sciences) analytical software program was used. To establish some of the main characteristics of the analyzed variables, and to describe them, the indicators of descriptive statistics, namely the following statistical indices, were calculated: mean value (\( \bar{X} \)), extreme values (minimum and maximum), standard deviation (\( \sigma \)), and variation coefficient (V). Taking into account that two independent samples were analyzed, the Mann-Whitney test or Wilcoxon test was applied. Every test procedure starts with a certain assumption – the null hypothesis. The initial hypothesis in Mann-Whitney test can be formulated in two ways. Null hypothesis can assume that distribution functions of two basic sets (represented by samples) are equal, while the alternative hypothesis would imply they are different. The statement that median values of the main sets from where the samples originate are equal, that is the difference between them is equal to zero, can be in the background of the null hypothesis for this test. The initial hypotheses and decision-making method for testing the assumption of equality of the median values of the two main sets (two populations) are presented in Table 1.

Table 1: Hypotheses and methods of decision making for testing the assumption of equality of median values of two main sets

<table>
<thead>
<tr>
<th>Test type</th>
<th>Null hypothesis</th>
<th>Alternative hypothesis</th>
<th>Critical value</th>
<th>Rejection area of the hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-tailed test</td>
<td>( H_0: n_1 - n_2 = 0 )</td>
<td>( H_1: n_1 - n_2 \neq 0 )</td>
<td>( T_L ) and ( T_U )</td>
<td>( T_i \leq T_L ) or ( T_i \geq T_U )</td>
</tr>
<tr>
<td>Right-tailed test</td>
<td>( H_0: n_1 - n_2 \leq 0 )</td>
<td>( H_1: n_1 - n_2 &gt; 0 )</td>
<td>( T_U )</td>
<td>( T_i \geq T_U )</td>
</tr>
<tr>
<td>Left-tailed test</td>
<td>( H_0: n_1 - n_2 \geq 0 )</td>
<td>( H_1: n_1 - n_2 &lt; 0 )</td>
<td>( T_L )</td>
<td>( T_i \leq T_L )</td>
</tr>
</tbody>
</table>

Source: Šošić; I., (2006) Primijenjena statistika (Applied Statistics); Školska knjiga; Zagreb; p. 345
In this research, the authors applied the two-tailed Mann-Whitney test, whose initial assumption implies equality of median values of two analyzed populations. \( T_1 \) is a test value, and \( T_L \) and \( T_U \) are critical values that can be read, from the appropriate tables for Mann-Whitney test or Wilcoxon test, and used if the test is conducted based on small-scope samples. When \( n_1 > 10 \) or \( n_2 > 10 \) (or both samples are larger than 10), the test value \( T_1 \) shows approximately normal distribution, so that the critical tabular value is read from Normal distribution tables.

Values of ordinal variables in independent samples that originate from two populations those are from two main sets form the basis for conducting this test. Size of the sample from the first population was marked \( n_1 \), and the one from the second population \( n_2 \). It was assumed that \( n_1 \leq n_2 \). If the samples were of different sizes, the one with the smaller number of units was considered first.

To calculate the test value \( T_1 \), based on which one can arrive at the value of the relevant ratio that enables testing the hypothesis being laid down, it was necessary to merge the values of both samples first and then get a new set with \( n_1 + n_2 \) elements. In the following step, the ranks were added to ordinal values of a new set, so that the lowest value was awarded rank 1, and the highest value the rank equal to \( n_1 + n_2 \). If several equal values appeared in a set, mean rank was awarded to each of them. The test value \( T_1 \) represents a set of ranks added to elements of a sample from the first population in a shared set. If the number of units in samples was larger than 10, then the corresponding ratio for testing the hypothesis being laid down was calculated, based on the following expression (Šošić, 2006: 345):

\[
Z = \frac{T_1 - \mu_{T_1}}{\sigma_{T_1}}
\]

(1)

where, \( \mu_{T_1} \) means arithmetic mean value and \( \sigma_{T_1} \) means standard deviation, which were calculated based on the following expressions (Šošić, 2006: 345):

\[
\mu_{T_1} = \frac{n_1(n_1 + n_2 + 1)}{2}
\]

\[
\sigma_{T_1} = \sqrt{\frac{n_1n_2(n_1 + n_2 + 1)}{12}}
\]

(2)

The decision, that is the conclusion on the hypothesis laid down, was made in the usual way by comparing the calculated \( Z \) value with theoretical value from Normal distribution tables for the desired significance level.

\( \chi^2 \) – test is applied by different statistical procedures. These include testing assumptions on the form of distribution, testing the hypothesis about equality of proportions of three or more sets, homogeneity test, and testing the assumption of independence of certain characteristics in contingency tables. The test of hypothesis
about equality of proportions, which was applied in this research, starts with the following hypotheses (Šošić, 2006: 353):

\[ H_0 : p_1 = p_2 = p_3 = \ldots p_k = p \]

\[ H_1 : p_1 \neq p_2 \neq p_3 \neq \ldots p_i \neq p \quad i = 1,2,\ldots,k \quad (3) \]

The initial, null hypothesis starts with the assumption that all main sets have equal proportion \( p \); that is, certain characteristic is present equally in all of them. If the proportion of the main set is not known, it is replaced with a common proportion of samples obtained from the following expression (Šošić, 2006: 353):

\[
\hat{p} = \frac{m_1 + m_2 + \ldots + m_k}{n_1 + n_2 + \ldots + n_k}
\]

\[
(4)
\]

The test value used as the basis for testing the hypothesis that has been laid down is the empirical value of hi-square (Šošić, 2006: 353):

\[
\chi^2 = \sum_{i=1}^{k} \frac{(f_i - e_i)^2}{e_i}
\]

\[
(5)
\]

where \( e_i \) denotes the expected frequencies that were determined based on the expression: \( e_i = n_i \hat{p}_i \) and \( n_i \) the size of samples taken from the given main sets. The value of the calculated test statistics was compared with tabular values of \( \chi^2 \) which were read for the desired significance level \( \alpha \), and degree of freedom \( k-1 \).

4. Data and analysis

The target groups for the study were the managers of medium-sized companies in AP Vojvodina. According to the Working Document of the Statistical Office of Serbia “Companies in the Republic of Serbia, by size, 2008”, the number of companies in AP Vojvodina which presented their final accounts for 2008 was 23,391; of these, 19,543 were micro, 2,911 small, 791 medium and 146 large (Fig. 1). The number of medium-sized companies with foreign capital was 134. The survey was conducted between June and September, 2009.
The sample consisted of only medium-sized companies in AP Vojvodina. In this research, the authors used the methodology of the Statistical Office of the Republic of Serbia, whose classification of legal entities was based on the number of employees, and considered companies employing 50-249 employees medium-sized (Statistical Office of the Republic of Serbia, Structural business statistics – Methodology, Companies in the Republic of Serbia by size, 2010 p. 5).

The research was based on the questionnaire modeled on the lines of the one used by Hofstede in his original research, which was modified for the purpose of this research. For each dimension (power distance, uncertainty avoidance, individualism versus collectivism, and masculine versus feminine dimensions), the questions had the form of attitudes with which the managers from the two group of companies were expected to agree or disagree and convey the same in terms of the 1-5 Likert’s scale, where 1 means complete disagreement and 5 total agreement. Looking at the structure of FDI in AP Vojvodina, in terms of the countries of capital’s origin it can be seen that the above mentioned dimensions of these countries are divergent in relation to the cultural dimensions of the Republic of Serbia (Table 2).
Table 2: The rank of countries investing in AP Vojvodina according to Hofstede’s indexes of cultural dimensions

<table>
<thead>
<tr>
<th>Countries investing in AP Vojvodina</th>
<th>Participation in the total FDI in APV</th>
<th>Power distance index (PDI)</th>
<th>Uncertainty Avoidance index (UAI)</th>
<th>Individualism (IDV)</th>
<th>Masculinity (MAS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>17%</td>
<td>50</td>
<td>72</td>
<td>76</td>
<td>70</td>
</tr>
<tr>
<td>Belgium</td>
<td>12%</td>
<td>65</td>
<td>94</td>
<td>75</td>
<td>54</td>
</tr>
<tr>
<td>Germany</td>
<td>12%</td>
<td>35</td>
<td>65</td>
<td>67</td>
<td>66</td>
</tr>
<tr>
<td>France</td>
<td>10%</td>
<td>68</td>
<td>86</td>
<td>71</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Hofstede (2001); Culture’s Consequences; Second edition; SAGE Publications; pp. 87; 150; 215; 286 and The strategy of improving the export capacities of the AP Vojvodina 2011-2015; Novi Sad, 2011; p 35

The research was conducted on medium-sized companies in two phases: the first phase included those companies with a share of foreign capital in the ownership structure and the second phase those with domestic capital. In the first phase, the basic set consisted of 134 medium-sized companies with a certain proportion of foreign capital in their ownership structure. Owing to the small size of the basic set, no sampling was considered necessary and hence the data was collected from the total population, i.e. from the entire basic set. The research was conducted in 44 companies, which amounted to a response of 33%.

Figure 2: The number of medium sized companies in AP Vojvodina in 2008

Source: http://webrzs.stat.gov.rs/WebSite/repository/documents/00/00/22/05/rd662009.pdf

The basic set of the second phase consisted of 657 companies. A set of 120 companies (18.2% of the basic set) was formed. Given that 60% the companies’ share was in the Backa region, 28% in Banat and 14% in Srem, the sample was
structured the same way. The research was conducted in 46 companies, which amounted to a response of 38%. The sample was realized in Backa with 50%, in Banat 26% and in Srem with 24%.

The realized sample can be considered highly appropriate for arriving at conclusions for several reasons. The number of questionnaires was statistically large enough to permit conclusions. This research, according to authors’ knowledge, was the first of its kind in terms of its subject of research; therefore, it can be considered a «baseline» survey for which there can be no strong and comparable parameters, especially because attitudes (and not objective parameters of company functioning) were explored. The sample consisted of a significant part of the overall set, and was structured according to the criteria of equitable regional distribution in AP Vojvodina, which made it highly representative.

5. Results and discussion

Tables 3 to 8 present the research results. The first column of the tables shows the questions taken from Hofstede`s (2001: 467) questionnaires (used in his original research). The second column indicates that the sample consisted of managers of companies that operate with either foreign capital (hereafter referred to as M1), or domestic capital (hereafter referred to as M2).

The third column indicates the type of test (Mann-Whitney or Chi-Square test) used in this research, the fourth column the number of observations, and the fifth and sixth columns the values of test statistics or probability. The seventh column depicts the frequency of respondents’ agreements with the statements in the first column, besides making the observed dimension of culture operational. All hypotheses were tested with a significance level of 5% (p = 0.05).

5.1. Power distance

The questions concerning power distance, listed in the first column of Table 3, were taken from Hofstede’s research. The acceptance of the consultative style as the preferred management style, and self-assessment of the management style as consultative indicate low power distance; frequency of appearance of fear among employees when they need to express disagreement with their managers is proof of the high power distance; therefore, the results obtained should be interpreted in that context.
Table 3: Values of test statistics, probability and frequency of replies by managers of the two groups of companies to the questions, indicating power distance

<table>
<thead>
<tr>
<th>Power distance</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>p</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. According to your experience how frequently occurs the problem that employees are afraid to express disagreement with their managers in your company?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 45</td>
<td>-0.993</td>
<td>0.321</td>
<td>M1 (31.8%) and M2(22.3%) ‘frequently’ and ‘very frequently’</td>
</tr>
<tr>
<td>2. From the listed management styles (authoritarian, convincing, consultative and democratic), which would you name as most suitable?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-0.282</td>
<td>0.778</td>
<td>M1 (47.7%) and M2 (41.3%) consultative</td>
</tr>
<tr>
<td>3. Which type of the listed management styles (authoritarian, convincing, consultative, and democratic) would you like to work under?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>4.217</td>
<td>0.239</td>
<td>M1 (50%) and M2 (39.1%) consultative</td>
</tr>
</tbody>
</table>

Source: Author’s calculations

On the basis of the realized levels of significance of the applied tests, shown in Column 6, it can be concluded that there are no statistically significant differences between the average attitudes of the two groups of company managers on questions relating to the dimension of power distance. These results further show that the attitudes of the second group of managers converge with those of the first group, implying a low power distance. The convergence of managers in the second group of companies toward a lower power distance indicates the abandonment of the culture of power, which is one of the identified obstacles to the growth of companies in the Republic of Serbia.

5.2. Uncertainty avoidance

To measure uncertainty avoidance, questions were taken from Hofstede original research and the same are listed in Column 1, Table 4. The tolerance toward breaking company rules and the low level of stress during encounters with uncertain situations indicate low uncertainty avoidance, while preferences to staying longer at a position indicate high uncertainty avoidance; the results obtained should be interpreted in that context.
Table 4: Values of test statistics, probability and frequency replies by managers of the two groups of companies to the questions indicating uncertainty avoidance

<table>
<thead>
<tr>
<th>Uncertainty avoidance</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>p</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To which extent you agree with the statement that company rules should not be</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-1.081</td>
<td>0.280</td>
<td>M1 (50.0%) and M2 (63.1%) ‘agree’ and ‘strongly agree’</td>
</tr>
<tr>
<td>broken, even in case the employee finds that it is in the best interest of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>company?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How long do you think you will continue working for/managing this company?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>14.525</td>
<td>0.001</td>
<td>M1 (53.5%) and M2 (33.3%) ‘More than five years (but I probably will leave before I retire)’</td>
</tr>
<tr>
<td>3. How often do you feel nervous or tense at work?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>0.662</td>
<td>0.718</td>
<td>M1 (54.5%) and M2 (50.0%) ‘sometimes’</td>
</tr>
</tbody>
</table>

Source: Author’s calculations

Based on the results of Mann-Whitney test and the realized level of significance (p = 0.280), one can conclude that there are no statistically significant differences between the central tendencies of the responses of the managers of the two groups of companies to the question whether breaking the company rules by employees should be tolerated.

The results of Chi-Square test and the realized level of significance (p = 0.001) indicate that there are differences in the frequency distribution of responses to the question of assessing the length of stay at a current job position between the managers of the two groups of observed companies. The results of Column 7 show that the percentage of managers who chose the answer “more than five years, but before retirement” is higher for the first group of companies (53.5%) than that for the second group (33.3%).

Column (6) in table 4 provide us with the results of Chi-Square test and the realized level of significance (p = 0.718), from which we can conclude that there are no statistically significant differences between the managers of the two groups of companies in the distribution of response frequencies to the question about the frequency of stress at work. However, the results in Column 7 indicate that differences do exist between the two groups of managers, although they are
statistically insignificant: managers of the first group of companies feel nervous more often (54.5%), than do the managers of the second group (50.0%).

As compared to the managers of the second group of companies, the managers of the first group showed stronger acceptance to attitudes concerning job stability and length of stay, and also that they were under stress more frequently. This indicates that their degree of uncertainty avoidance is higher than that of the managers of the second group of companies. These results are contrary to those expected, but this can be explained as due to the recession conditions under which the research was conducted. The stress level in managers of the first group of companies was higher, because those managers had to lead and organize their business activities in a country which was not institutionally regulated by then, as were the countries investing in AP Vojvodina. They were doing business with capital originating from countries, which to a large extent determine the mechanisms of administrative control as a way of reducing the uncertainty, and the results should be interpreted in that context.

5.3. Collectivism and individualism

In Hofstede’s study, the dimension, identified as individualism versus collectivism, is strongly correlated with the relative importance that respondents placed on the items presented in Tables 5 (for individualism) and 6 (collectivism).

Table 5: Values of test statistics, probability and frequency of replies by managers of the two groups of companies to the questions indicating individualism

<table>
<thead>
<tr>
<th>Individualism</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>p</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How important is it for you to have challenging work, i.e. to do work from which you can get a personal sense of accomplishment?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>15.740</td>
<td>0.000</td>
<td>M1 (86.4%) and M2 (82.6%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>2. How important is it for you to have considerable freedom to adopt your own approach to the job?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-2.443</td>
<td>0.015</td>
<td>M1 (86.4%) and M2 (71.8%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>3. How important is it to you to have a job which leaves you sufficient time for your personal or family life?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-0.484</td>
<td>0.628</td>
<td>M1 (61.3%) and M2 (58.7%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
</tbody>
</table>

Source: Author’s calculations
Table 5, column (6) illustrates results from the Chi-Square test and the realized level of significance \( p = 0.000 \), from which we can conclude that, between the managers of the two groups of companies, there are statistically significant differences in the frequency distribution of responses to the question about the importance of the work that gives a sense of personal achievement. Challenging work is of “utmost importance” and “very important” to the managers of the first group of companies in 86.4% of the cases, as compared to 82.6% of the cases to the managers of the second group (Column 7, Table 5).

According to the results from the Mann-Whitney test and the realized level of significance \( p = 0.015 \), it can be concluded that, between the managers of the two groups of companies, there are significant statistical differences in the central tendencies of response to the question about the work that enables personal choice of approach. The results in Column 7, Table 5 indicate that the managers of the first group of companies considered it of “utmost importance” and “very important” in 88.60% of the cases to have the possibility to choose their own approach to work, in comparison to 71.8% of managers of the second group who considered the same way. Based on the results of Mann-Whitney test and the realized level of significance \( p = 0.628 \), it can be concluded that between the managers of the two groups of companies there are no significant statistical differences in the central tendencies of response to the question of importance in considering work that leaves enough time for personal and family life. Managers of the first group of companies value the individualistic items – the ability to perform challenging work and the ability to choose their own approach to business – more than managers of the second group of companies do.

The collectivistic items, mentioned in the form of questions in Table 6, relate to the managers’ expectations of the working conditions that companies should provide.

Column (6) in Table 6 shows results of Mann-Whitney test and the realized level of significance \( p = 0.125 \), from which we can conclude that between the managers of the two groups of companies there are no statistically significant differences in the central response tendencies to the question of satisfaction with training possibilities.

Based on the results of Chi-Square test and the realized level of significance \( p = 0.000 \), it can be concluded that, between the managers of the two groups of companies, there are statistically significant differences in the distribution of response proportions to the question of the importance of good physical work conditions.

Mann-Whitney test results and the realized significance level \( p = 0.032 \), reveal statistically significant differences between the managers of the two groups of companies in the central response tendency to the question of the importance of having a job that enables full use of one’s skills and abilities.
Table 6: Values of test statistics, probability and frequency of replies by managers of the two groups of companies to the questions indicating collectivism

<table>
<thead>
<tr>
<th>Collectivism</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>p</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To which extent are you satisfied with training opportunities (to improve your skills or to learn new skills)?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-1.535</td>
<td>0.125</td>
<td>M1 (56.8%) and M2 (41.3%) ‘very satisfied’ and ‘satisfied’</td>
</tr>
<tr>
<td>2. To which extent do you find it important to have good physical working conditions (ventilation, lighting, work space, etc.)?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>18.921</td>
<td>0.000</td>
<td>M1 (77.3%) and M2 (60.0%) ‘of utmost importance to me’ and ‘very important’</td>
</tr>
<tr>
<td>3. To which extent do you find it important to use your skills and abilities on your job?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-2.141</td>
<td>0.032</td>
<td>M1 (95.5%) and M2 (78.3%) ‘of utmost importance to me’ and ‘very important’</td>
</tr>
</tbody>
</table>

Source: Author’s calculations

Hofstede found that collectivistic goals of labor are rather unimportant in wealthy countries, because they were already being fulfilled. It is in this context that one needs to interpret the fact that the managers of the first group of companies value the collectivistic items more than the managers of the second group do, when they come to work in a country in transition, where these items were still not satisfied. The following observation made by Hofstede, G., and Hofstede is relevant in this regard: “In rich countries training, physical conditions, and the use of skills may be taken for granted, which makes them relatively unimportant as work goals. In poor countries these things cannot be at all taken for granted: they are essential in distinguishing a good job from a bad one, which makes them quite important among one’s work goals.” (Hofstede and Hofstede, 2005:77).

5.4. Masculine and feminine values

Questions and statements in Tables 7 and 8 were taken from Hofstede’s questionnaire to measure the masculine versus feminine values of the managers of the two groups of companies in AP Vojvodina.
Table 7: Values of test statistics, probability and frequency of replies by managers of the two groups of companies to the questions indicating masculine values

<table>
<thead>
<tr>
<th>Masculine values</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>p</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To which extent is it important to have an opportunity for advancement to higher level jobs?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>11.167</td>
<td>0.011</td>
<td>M1 (63.6%) and M2 (47.8%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>2. To which extent is it important to get the recognition you deserve when you do a good job?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>21.642</td>
<td>0.000</td>
<td>M1 (68.2%) and M2 (41.3%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>3. To which extent is it important to have an opportunity for high earnings?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>1.176</td>
<td>0.555</td>
<td>M1 (75.0%) and M2 (69.5%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
</tbody>
</table>

Source: Author’s calculations

Table 7, column (6) presents results of the Chi-square test and the realized level of significance (p = 0.011), from which it can be concluded that there are statistically significant differences between the managers of the two groups of companies in their response to the question of the importance of opportunities for advancement to higher level jobs. The results in Column 7, Table 7 show that the managers in the first group of companies considered, in 63.6% of the cases, the possibility of promotion to higher positions “very important” and “of utmost importance”, as compared to 47.8% of the managers of the second group, who considered the same way.

The results of the Chi-Square test and the realized significance level (p = 0.000), allow us to conclude that, between the managers of the two groups of companies, statistically significant differences exist in the distribution of answers, when asked about the importance of getting recognition for a well done job. In the first group of companies, the managers judged, in 68.2% of cases, that getting recognition for a well done job was “of utmost importance” and “very important” to them, as compared to only 41.3% of the managers of the second group of companies, who also judged the same way (Column 7, Table 7).

Table 7, column (6) provide us with results of Chi-Square test and the realized significance level of p = 0.555, based on which, we can conclude that, between the managers of the two groups of companies, there were no statistically significant
differences in the frequency distribution of responses to the question about the importance of opportunities for higher income.

As regards the feminine values, the managers of the two groups of companies were asked to express their degree of acceptance to the work goals presented in the first column of Table 8. The same questions were used by Hofstede in his research to measure and indicate the feminine dimension of a culture.

The results of Mann-Whitney test and the realized level of significance \( p = 0.422 \), allow us to conclude that, between the managers of the two groups of companies, there were no statistically significant differences in the average response to the question about the importance of cultivating good relations with other employees and managers. Based on the level of significance of the Chi-Square test \( p = 0.000 \), one can conclude that, between the managers of the two groups of companies, statistically significant differences exist in the distribution of the answers to the question about the importance of living and working in an area that is desirable for personal and family lives.

Table 8: Values of test statistics, probability and frequency of replies by managers of the two groups of companies to the questions indicating feminine values

<table>
<thead>
<tr>
<th>Feminine values</th>
<th>Sample</th>
<th>Test type</th>
<th>Number of observations</th>
<th>Test statistics</th>
<th>( p )</th>
<th>Frequencies of replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To which extent do you find your working relationship with your colleagues and immediate managers important?</td>
<td>M1 and M2</td>
<td>Mann-Whitney</td>
<td>44; 46</td>
<td>-0.802</td>
<td>0.422</td>
<td>M1 (93.2%) and M2 (82.6%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>2. To which extent do you find it important to work in an area which is desirable to you and your family?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>89.151</td>
<td>0.000</td>
<td>M1 (75.0%) and M2 (58.7%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
<tr>
<td>3. To which extent do you find your security that you will be able to work for this company as long as you want to important?</td>
<td>M1 and M2</td>
<td>Chi-Square</td>
<td>44; 46</td>
<td>9.646</td>
<td>0.022</td>
<td>M1 (83.7%) and M2 (69.6%) ‘very important’ and ‘of utmost importance to me’</td>
</tr>
</tbody>
</table>

Source: Author’s calculations

The obtained results of Chi-Square test and the realized level of significance \( p = 0.022 \) allow us to conclude that, between the managers of the two groups of
companies, significant difference exist in the distribution of answers to the question about the importance of the sense of security, i.e. to remain on the current position as long as one wishes to. From the results in Column 7, Table 8, it is evident that the managers of the first group of companies assessed, in 83.7% of cases, the existence of such a security as “very important”, as compared to 69.6% of the managers of the second group of companies, who assessed the same way.

Managers of the first group valued the security to work for company as long as they want more than the managers of the second group of companies did. This finding is contrary to authors’ expectations. The finding should be interpreted in the context of the recessionary business conditions under which the research was conducted, and the extreme instability of managers’ positions.

6. Conclusion

The hypothesis which we set was not supported by the analysis and interpretation of the research results. Hypothesis was not confirmed in relation to the expected degree of acceptance of attitudes used to measure the particular dimensions of organization culture by two groups of respondents. Namely the results show that the degrees of acceptance of attitudes used to measure the power distance, uncertainty avoidance, individualism versus collectivism, and masculine versus feminine values by the managerial subcultures of the two groups of companies in AP Vojvodina (operating with foreign or domestic private capital) is different.

New contribution to the economic science is that managers of the companies operating with foreign private capital in transition economies, to a greater extent accept values inherent for the transition economies (feminine, collectivistic) than values typical for developed economies. This finding suggests that the dimensions of culture in transition countries and companies that operate in them, to make their post recession exit strategy more effective. The survey results are a contribution to economic science in the part that deals with understanding the direction of change in dimensions of organizational culture in order to strengthen the competitiveness of companies in the post-recession conditions: doing business in post recession conditions should be more based on the feminine values and the increased need to respond to the uncertainty. Research results indicate tendencies toward crossvergence, instead of convergence, of the value systems of the transition countries’ cultures in relation to the value systems typical of the cultures of the developed European economies. The research results show that the attitudes of the managers of the second group of companies converge with those of the managers of the first group of companies, implying a low power distance. Low power distance in managerial sub-culture of the second group of companies is an important sign of moving from the power culture onto the task culture, which is necessary
precondition for accomplishing and maintaining of companies’ competitive advantage. When it comes to other dimensions of organizational culture, we can make conclusions about tendencies toward crossovergence: managers of the first group of companies to a greater extent, show a higher aversion to uncertainty in relation to the managers of the second group of companies, which can be explained by their attempts to operate in an environment that is not sufficiently regulated. Administrative (through standardization of roles) instead of social control will be observed as a prerequisite for internationalization of companies operating with private capital of domestic origin. Even in a masculine culture and companies in the recession and post-recession conditions, we can notice a shift towards feminine values and the need to rebuild relationships based on trust as a way to reduce companies’ transaction costs in both the internal and external communication. Although the managers of the first group of companies to a greater extent valued individualistic items in relation to the managers of the second group of companies, indicative is their inclination towards physical working conditions. In transition countries, physical conditions cannot be taken for granted, which makes them important as work goal. It can be expected that individualism as a dimension of organizational culture of companies from the AP Vojvodina operating with private capital of domestic origin will be affirmed after they become aware that investments in creating culture of innovations are profitable investments aimed at accomplishing and maintaining competitiveness in a long run rather than expenditures.

The main limitation of the research was the lack of relevant time-series surveys by Serbia’s national culture and its regional cultures, besides the very small number of comparative studies made in this field.

Future research of organizational culture should be directed toward the study of non-managerial cultures in companies, because the non-managerial subculture is distinguished from the managerial culture by the depth, width and the speed of the changes in the values, as also by the ways it influences the acquiring and maintaining competitive advantages of companies.

Obtained results will enable the management of cultural distance costs by the companies in the process of their inclusion into the European division of labor and in the post-recession conditions. Results of the survey will be of assistance to policy makers of the countries that are in the process of joining the EU in order to enhancing non-price micro-competitiveness.
References


Utjecaj procesa pridruživanja Europskoj uniji na organizacijsku kulturu poduzeća koja posluju u tranzicijskim zemljama

Goran B. Andjelic2, Valentina Ivanic3, Vladimir D. Djakovic4

Sažetak

Cilj ovog istraživanja je otkriti pravce promjena dimenzija organizacijske kulture poduzeća koja posluju u AP Vojvodini, u momentu kada se Republika Srbija – kao tranzicijska zemlja – nalazi u procesu uključivanja u Europsku uniju. Inozemna izravna ulaganja iz zemalja članica EU, služe kao metoda za prenošenje kulturnih obrazaca. Metodologija istraživanja koja je ovdje korištena uključuje primjenu Mann Whitney i hi-kvadrat testova u cilju uspoređivanja stavova menadžera dviju skupina poduzeća u AP Vojvodini. Rezultati pokazuju da ne postoji statistički značajna razlika u stavovima menadžera dvije grupe poduzeća, u odnosu na pitanja koja određuju distancu moći. U AP Vojvodini, rodno muške vrijednosti i individualizam još uvijek su cijenjene u većoj mjeri od strane menadžera poduzeća koja posluju s privatnim kapitalom stranog podrijetla u odnosu na menadžere poduzeća koja posluju s privatnim kapitalom domaćeg podrijetla. Menadžeri poduzeća sa stranim kapitalom pokazuju veći stupanj izbjegavanja neizvjesnosti u odnosu na menadžere poduzeća koja posluju s privatnim kapitalom domaćeg podrijetla, što je u suprotnosti s očekivanjima autora, ali se objašnjava recesijskim uvjetima poslovanja pod kojima je provedeno istraživanje.

Ključne riječi: organizacijska kultura, konkurentnost, zemlje u tranziciji

JEL klasifikacija: A12, D23, M14, P27

1 Rad je financijski podržan od strane Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije, u okviru projekta broj 47028, te Centra za strateško ekonomsko istraživanja “Vojvodina-CESS”, Novi Sad, Republika Srbija.

2 Izvanredni profesor, Univerzitet Edukons, Fakultet za uslužni biznis, Vojvode Putnika bb, Sremska Kamenica, Republika Srbija. Znanstveni interes: financijski menadžment, investicijski menadžment, strateški menadžment. Tel.: +381 21 489 3639. Website: http://www.educons.edu.rs. E-mail: andjelic1975@gmail.com.

3 Magistar ekonomskih znanosti, Agencija za ravnomerni regionalni razvoj AP Vojvodine, Mite Ružića 2, Novi Sad, Republika Srbija. Znanstveni interes: regionalni razvoj, organizacijska kultura i menadžment. Tel.: +381 63 589 555. Website: http://www.vojvodina-cess.org. E-mail:v.ivanic@vojvodina-cess.org (kontakt osoba).

4 Asistent, Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Trg Dositeja Obradovića 6, Novi Sad, Republika Srbija. Znanstveni interes: proizvodni sustavi, organizacija i menadžment (investicijski menadžment). Tel.: +381 21 485 2190. Website: http://www.iim.fbn.uns.ac.rs; http://www.iim.ftn.uns.ac.rs/. E-mail: v_djakovic@uns.ac.rs.