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CULTURAL DISTANCE IN THE CONTEXT OF EUROPEAN REGIONAL ECONOMIC INTEGRATION

Kulturní vzdálenost v kontextu evropské regionální ekonomické integrace

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Annotation

Regional integration is the process of overcoming barriers and creating a common market for goods, services, capital and people within the geographically close countries. The aim of this paper is to investigate the calculation of cultural distance and its modification into measurement applicable in regional economic integration context. The formula of calculating the cultural distance of each country in regional economic integration is derived from the computations developed by Kogut and Singh. Hofstede's framework of six cultural dimensions for countries that belong to the selected European regional economic integration blocks is applied to get the national cultural distances and the average cultural distance of the regional blocks. The findings offer the comparison within the analysed member states and stimulate the discussion over the cultural dissimilarities of neighbouring countries and the diversity on the common market.

Key words

cultural distance, Hofstede, regional economic integration

Anotace

Regionální integrace je procesem překonávání bariér a zároveň vytvoření společného trhu pro zboží, služby, kapitál a osoby v rámci geograficky blízkých zemí. Příspěvek se zabývá výpočtem kulturní vzdálenosti a jeho modifikací použitelné k výpočtu kulturní vzdálenosti v kontextu regionálních ekonomických integračních uspořádání. Vzorec k výpočtu kulturních vzdáleností zemí v rámci integračních uskupení je odvozen od kalkulace provedené dvojicí Kogut a Singh. Hofstedeho rámec šesti kulturních dimenzí je použit pro země, které jsou členy zvolených Evropských regionálních ekonomických integračních uskupení, k získání kulturní distance dané země a průměrných hodnot v rámci regionálního uskupení. Závěry nabízí komparaci analyzovaných členských států a podněcují diskuzi ohledně kulturních disparit sousedních států a diverzity na společném trhu.

Klíčová slova

kulturní vzdálenost, Hofstede, regionální ekonomická integrace

JEL classification: J11, Z13

1. Introduction

The economic integration is a phenomenon realized in both continental and intercontinental economic blocks with the aim to increase productivity and stimulates trade between the member states. Important to note that the economic integration exists in different stages. As a term of regional economic integration we understand agreements among neighbouring countries in a geographic region. This integration eases or completely removes barriers to free flow of goods, services, capital and people as factors of production and it enables businesses to find the most suitable locations at the same time (Hill, 2014). Not only geographical proximity is required for effective economic integration, but also similarities in terms of culture, history and ideology; competitive or complementary economic linkages, and preferably a common language among member states (Čuhlová, 2017, Rauch, 2001). Countries around the world have been forming certain regional economic integration arrangements often without deep considering real impacts on citizens and sustainability of businesses.

Moreover, the regional economic integration brings freedom for workforce to work anywhere within the region. This closely relates to the dynamic trend of migration that is increasing in the last decades and is becoming the natural part of nowadays life style (Rauch, 2001). Naturally, labour market changes into diverse environment. The workforce differs in terms of culture, gender, ethnicity, race and other characteristics. As any firm conducting business in Europe must possess a thorough understanding of local economic integration affecting its organizational strategy, human resource management has to come out with suitable strategies to effectively manage the multinational teams and diverse workforce and their specifics (Dartey-Baah, 2013).

Diversity brings potential source of synergy as well as of the disruptiveness. Main cause is made by cultural background of the employees that might colligate in their interactions. Human resource management nowadays incorporates diversity and intercultural management as part of the practices (Dartey-Baah, 2013, Shenkar, 2012). The influence of culture on the overall performance increases together with increasing level of regional economic integration.

As Colakoglu and Caligiuri (2008) point out, although there are measures for national cultural distance that enable multinational firms to know the cultural distance between host and home country of the headquarter and subsidiary for example, there is still a problem of full understanding a region in terms of its cultural differences.

2. Methodology and data

The research question we ask is how to measure cultural distances in the context of regional economic integration since different approach for the calculation is needed.

In this paper, cultural distance is measured for following regional economic integration blocks: European Union (EU) consisting of current number of member states and Visegrad group. For further illustrations and understanding, cultural distance for founder members of European Union is to be analyzed as well. Since all the EU founder member states and member states of Visegrad group are still members of current EU¹⁴, the cultural distance is calculated for totally 28 countries; however in various grouping.

To calculate the cultural distances of the countries in selected regional economic integration blocks, we rely on the cultural framework developed by Hofstede (Hofstede and Hofstede, 2001) that currently consists of six cultural dimensions. Dataset for each country contains a score on following national cultural dimensions: power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long vs. short term orientation (complemented the model in 2001) and indulgence vs. restraint (complemented the model in 2010). All Hofstede's cultural dimensions are briefly discussed below.

Power distance stands for the inequality among members of society and the power distribution. In countries with low power distance, there is less hierarchical order, members are considered as equal and relations are more democratic. Dimension of individualism versus collectivism reflects whether people feel to be part of any group, try to achieve personal or group goals and define themselves more as "I" or "we". The masculinity vs. femininity preference is extend of importance on masculine values such as individual achievement, assertiveness, materialism, strength and encouragement of competitive environment. Contrary, feminine-oriented societies prefer cooperation, relationship building, modesty and preference is given on quality of life and the environment. Next, uncertainty avoidance is the degree to which society feels uncomfortable with uncertainty, ambiguity and as well as in unstructured situations. Moreover, it measures the degree of relying on rules and plans (Hofstede and Hofstede, 2001, Hofstede et al, 2010).

Long term versus short term normative orientation generally distinguishes between the East and West. Short term-oriented society is characterized by personal steadiness, protecting and keeping own "face" and reciprocation of favours. On the other side, long term-oriented culture encourages thrift. The latest dimension of indulgence stands for relatively free gratification of human drives of enjoying life, leisure time and gives importance to freedom. Restrained cultures are contrary more regulated by strict social norms (Hofstede et al, 2010).

Values of cultural dimensions for all countries of selected economic integration blocks are presented in table 1. They are a base for the computations of cultural distances. As it has been already said, all selected countries are current EU member states. Different framing in the table then shows the integration blocks within – firstly the founder EU member states and secondly the Visegrad group member states.

¹⁴ The United Kingdom remains a full member of the EU till March 2019 (Europa.eu, 2018).

Tab. 1: Scores of cultural dimensions of analysed countries

| Country | PDI | INV | MAS | UAI | LTO | IND |
|----------------|-----|-----|-----|-----|-----|-----|
| Belgium | 65 | 75 | 54 | 94 | 82 | 57 |
| France | 68 | 71 | 43 | 86 | 63 | 48 |
| Germany | 35 | 67 | 66 | 65 | 83 | 40 |
| Italy | 50 | 76 | 70 | 75 | 61 | 30 |
| Luxembourg | 40 | 60 | 50 | 70 | 64 | 56 |
| Netherlands | 38 | 80 | 14 | 53 | 67 | 68 |
| Bulgaria | 65 | 75 | 54 | 94 | 82 | 57 |
| Denmark | 18 | 74 | 16 | 23 | 35 | 70 |
| Estonia | 40 | 60 | 30 | 60 | 82 | 16 |
| Finland | 33 | 63 | 26 | 59 | 38 | 57 |
| Croatia | 73 | 33 | 40 | 80 | 58 | 33 |
| Ireland | 28 | 70 | 68 | 35 | 24 | 65 |
| Cyprus | | | | | | 70* |
| Lithuania | 42 | 60 | 19 | 65 | 82 | 16 |
| Latvia | 44 | 70 | 9 | 63 | 69 | 13 |
| Malta | 56 | 59 | 47 | 96 | 47 | 66 |
| Portugal | 63 | 27 | 31 | 104 | 28 | 33 |
| Austria | 11 | 55 | 79 | 70 | 60 | 63 |
| Romania | 90 | 30 | 42 | 90 | 52 | 20 |
| Greece | 60 | 35 | 57 | 12 | 45 | 50 |
| Slovenia | 71 | 27 | 31 | 104 | 28 | 33 |
| UK | 35 | 89 | 66 | 35 | 51 | 69 |
| Spain | 57 | 51 | 42 | 86 | 48 | 44 |
| Sweden | 31 | 71 | 5 | 29 | 53 | 78 |
| Czech Republic | 57 | 58 | 57 | 74 | 70 | 29 |
| Hungary | 46 | 80 | 88 | 82 | 58 | 31 |
| Poland | 68 | 60 | 64 | 93 | 38 | 29 |
| Slovakia | 104 | 52 | 110 | 51 | 77 | 28 |

PDI – Power Distance Index, INV – Individualism, MAS – Masculinity, UAI – Uncertainty Avoidance Index, LTO – Long Term Orientation, IND – Indulgence

*Complete data for Cyprus are not available

Source: Hofstede (2015)

As Shenker (2012) points out, differences among cultural dimensions rise a question whether they are equally decisive for measuring overall cultural distance. Kogut and Singh's (1988) formula for national cultural distance is a composite index making an assumption of dimensional equivalence since the aim of the paper is to provide general idea about cultural distances in the regional integration context. It has been used in numerous studies to find out the suitability of one country in doing business in other country (Morosini, et al, 1998) and it stays the most popular cultural distance calculation.

The formula 1 is calculated as an arithmetic average of the variance-corrected squared distances in single dimensions and it is formed as follows (Kogut and Singh, 1988):

$$CD_{jk} = \sum_{i=1}^n \{(I_{ij} - I_{ik})^2 / V_i\} / n \quad (1)$$

where CD_{jk} is the cultural distance between the j th and k th country, I_{ij} and I_{ik} are indicators of the i th cultural dimension for the j th and k th country, V_i stands for the variance of the i th cultural dimension, n is the number of cultural dimensions. In Kogut-Singh study from 1988, n stands for four original Hofstede's cultural dimensions. This formula compares two countries at a time however it is not completely suitable to visualize the compatibility of a regional economic integration in terms of cultural differences.

In this paper, the measure of cultural distance of regional integration is derived in the formula 2:

$$CD_j = \sum_{i=1}^n \{(I_{ij} - I_{iA})^2 / V_i\} / n \quad (2)$$

where CD_j is the cultural distance between country j and the average of the score of the dimension, I_{ij} is the country j 's score on the i th cultural dimension, I_{iA} is the average score of the countries on this dimension, V_i is the variance of the score of the dimension and n again stands for the number of cultural dimensions. Consequently, the cultural distance of regional economic integration is shown in formula 3:

$$CD_r = \sum_{i=1}^n CD_i / n \quad (3)$$

where CD_r is the cultural distance of the regional economic integration and n is the number of countries in the regional economic integration.

3. Findings

The visualization of the cultural distance of countries in regional economic integration can be used as an instant tool of information to multinational enterprises and human resource management which countries in the regional economic integration might be more compatible in terms of culture and which not.

Table 2 displays the calculated values of cultural distances for the regional integration blocks – the average values, standard deviation and variance within the integration. As can be seen, both standard deviation and variance values are significantly higher in the case of Visegrad group.

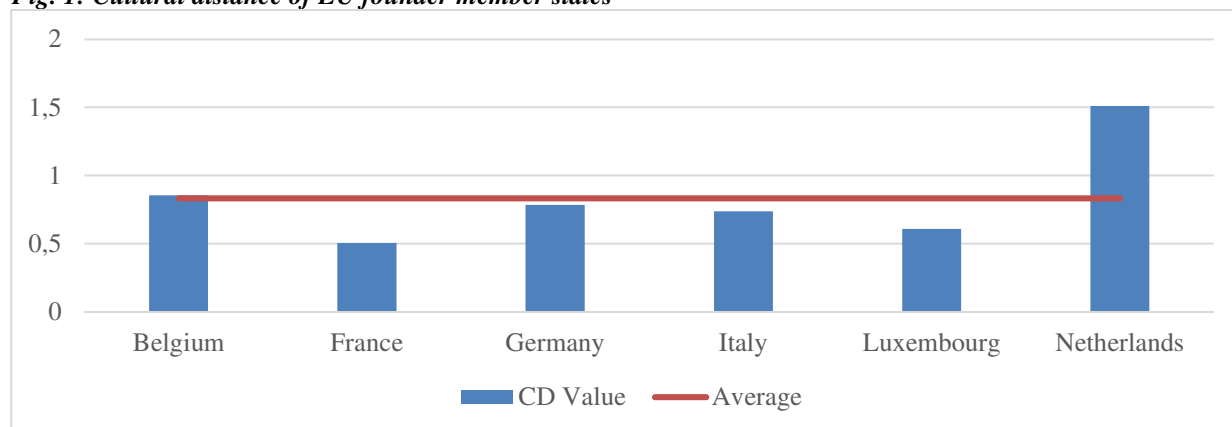
Tab. 2: Calculated values of cultural distance in selected regional economic integration blocks

| Economic integration | EU-6 | | | EU-28 | | | Visegrad group | | |
|----------------------|------|------|------|-------|------|------|----------------|------|------|
| | Av | Sd | Var | Av | Sd | Var | Av | Sd | Var |
| CD | 0.83 | 0.36 | 0.13 | 0.75 | 0.46 | 0.21 | 1.19 | 1.31 | 1.72 |

Source: own calculation

Figure 1 illustrates cultural distance of EU founder member states (Belgium, France, Germany, Italy, Luxembourg and Netherlands) thus the situation of European integration beginning in 1958. As the figure clearly shows, Netherlands is the odd out. The main reason is due to its feminine-oriented society compared to more masculine cultures of other countries from this group. Similar values of other dimensions enables more smooth mobility of people within the region as well as their integration.

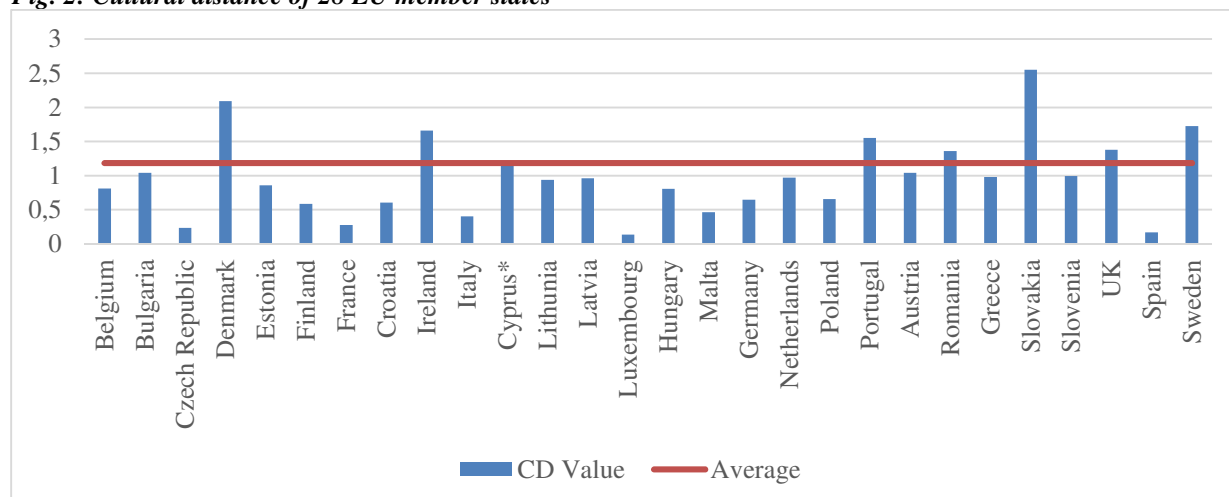
Fig. 1: Cultural distance of EU founder member states



Source: own proceeding based on the Hofstede's data (2015)

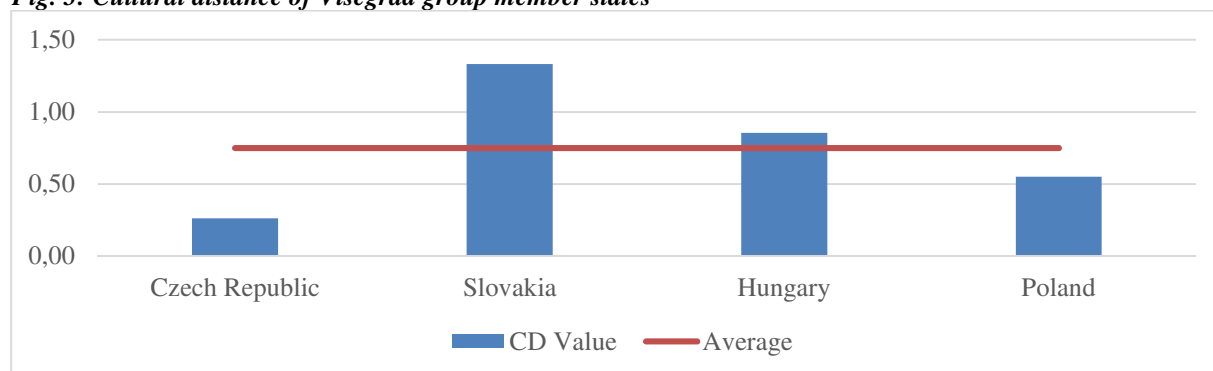
How the cultural distance within the European Union integration has changed from the beginning of its formation till nowadays can be seen on figure 2. The figure illustrates the values for current 28 member states. Please note that the value for Cyprus is displayed as average due to missing data on all cultural dimensions.

Slovakia and Denmark have notably higher cultural distances from the average within the group of member states. Contrary, the lowest values can be found in Luxembourg, Spain, Czech Republic and France. Not surprisingly, increasing number of member states in the integration means larger variance but due to the number of sample the difference is not significant.

Fig. 2: Cultural distance of 28 EU member states

Source: own proceeding based on the Hofstede's data (2015)

The importance of the sample itself in terms of its cultural dimensions' values exhibits the following figure. Figure 3 displays the cultural distance of Visegrad group member states, the integration in the Central Europe, namely Czech Republic, Slovakia, Hungary and Poland.

Fig. 3: Cultural distance of Visegrad group member states

Source: own proceeding based on the Hofstede's data (2015)

The largest variance was found in the dimension of Power Distance index where Slovakia even outstands the scale of 100. Even in the dimension of Masculinity, the Slovakia's score is an extreme outlier. Slovakia and the Czech Republic shared a common history in the last century as Czechoslovakia however the Czech Republic's Masculinity and Power Distance scores were reported as much more moderate than in case of Slovakia. Although such a difference is provoking the discussions over its validity, true is that after the countries' separation in 1993 a process of divergence in some highly visible areas, such as federal institutions, political discourse, television programs or for example news reporting was triggered (Bašňáková et al, 2016).

Conclusion

Distance between countries is not only the geographical and therefore the regional economic integration should not happen regardless other local factors. It certainly covers the cultural knowledge that has become an important part of business, foreign investment activities, diversity on labour market and its understanding. This interconnectivity of regions that occurs nowadays is also done by the effect of political decisions to integrate on a regional level.

The aim of the paper was to find out the measurement of cultural distance applicable for regional economic integration blocks. Methodology is based on dataset of national cultural dimensions developed by Hofstede and secondly, on a formula derived from Kogut and Singh. Both chosen approaches have been proved by many studies and belong to the most widely used. The derived formula for cultural distance of regional economic integration was applied on three European regional economic integration blocks and displayed the differences. The

information is applicable for human resource management and business management strategies when trying to make the best of the regional economic integration settlement.

The markets of the integrated blocks create a diverse meeting place of people with different cultural background and values. Even when the member states shared certain historical development, as the findings of this paper proved, the differences exist there. In this matter a following remark is made. Extreme values of Slovakia's cultural dimensions – especially compared to its neighbouring Czech republic – deserve more attention and analysis. However it was not the aim of this contribution and further research of the disparities is highly recommended.

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