



## DIMENSIONS OF CULTURE AND THE SIZE OF THE SHADOW ECONOMY IN THE MEMBER STATES OF THE EUROPEAN UNION

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JEL Classification: O17, Z13

Key words: culture, shadow economy, the European Union.

### Abstract

This article discusses connections between dimensions of culture and the size of the shadow economy in the European Union member states. A critical perusal of the literature led to the development of the theoretical groundwork, while statistical analysis revealed connections between the shadow economy and the dimensions of culture. The research findings suggest a strong stochastic relation of the culture in a given country and the size of its shadow economy. Countries with a high level of complacency, distrust of the authorities, collectivism and aversion to uncertainty are characterized by shadow economies of a substantial size.

### WYMIARY KULTURY A ROZMIAR SZAREJ STREFY W PAŃSTWACH CZŁONKOWSKICH UNII EUROPEJSKIEJ

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Kody JEL: O17, Z13

Słowa kluczowe: kultura, szara strefa, Unia Europejska.

### Abstrakt

W artykule przedstawiono związek między wymiarami kultury a rozmiarem szarej strefy w państwach członkowskich Unii Europejskiej. W celu zaprezentowania części teoretycznej wykorzystano krytyczną analizę źródeł naukowych, natomiast analiza statystyczna umożliwiła określenie zależności między szarą strefą a wymiarami kultury. Zgodnie z wynikami badań występuje silna stochastycznie zależność między kulturą danego kraju a rozmiarem szarej strefy. Kraje o wysokiej pobłażliwości, dystansie do władz, kolektywizmu i unikania niepewności charakteryzują się wysokim poziomem szarej strefy.

## Introduction

A shadow economy exists in every country (Enste & Schneider, 2000, p. 3). Its size will vary around the world, including the European Union member states. Differences arise from numerous circumstances. The essential factors causing the diversity among shadow economies in particular regions of the European Union are the culture of every country, its economic history, as well as its current social and economic development.

Kondzielnik (2017) has enumerated three groups of determinants that shape the size and prevalence of the shadow economy. These are focused on three aspects: legal, economic, and social. The latter group of determinants mainly deals with individual autonomy, flexibility and survival. Other cultural aspects are also important, as they play a major role in shaping the public's attitude towards the emergence and development of the shadow economy.

Philosophers and economists (such as Smith, Mill, Torsten Veblen) noticed that national cultures determine the economic behaviour of market entities (Buszko, 2019, p. 14, 15). Experts are increasingly interested in the influence of national culture on business policies and organizational culture. Buszko (2018, 2020) maintained that culture may determine, directly or indirectly, the attitude towards illegal activities.

The aim of this research is to determine a correlation between particular aspects of national culture (distrust of authorities, aversion to uncertainty, individualism, masculinity, and long-term orientation) and the size of the shadow economy in the European Union member states as of 2017. The research undertaken so far into this area has focused on the relation between dimensions of culture and the size of the shadow economy in the OECD countries.

## Research methodology

The main methods employed in this study were a critical analysis of scientific references and statistical analysis. In order to identify the dimensions of culture which determine business attitudes, the relevant literature was reviewed in

both the Polish and English languages. The indicators of various dimensions of culture for the European Union member states were retrieved from <https://www.hofstede-insights.com/country-comparison/>. Excel software was used to calculate the relations.

## **Dimensions of culture determining business attitudes by Hofstede**

In his most early research, Hofstede (1984) made an attempt to identify the business culture of his own country, taking into account several aspects. The psychologist later studied several other countries (such as the United States, and countries in Europe and Asia) against the assumed criteria (Wu, 2006, p. 35).

Hofstede (2011) finally identified six dimensions of culture which determine business attitudes, namely the power of distance, aversion to uncertainty, individualism-collectivism, masculinity-femininity, and short-term or long-term orientation.

The first dimension concerns a distrust of the authorities (power of distance). It indicates the degree to which weaker members of the society (deprived of power) accept an unequal distribution of power. The society with a short distance from authority will strive to make the distribution more equal. The society with a large distance from authority will accept the hierarchical order, where everyone finds their place (Andrijauskienė & Dumčiuvienė, 2007, p. 190).

The next dimension is based on the relation of individuals in a given culture. In individualistic societies, individuals look solely after themselves and their close families, whereas in collectivist societies individuals belong to groups that look after them in exchange for their loyalty (Soares & Shoham, 2007, p. 280).

The indicator of masculinity relates to the degree to which “masculine” values, like efficiency and success, dominate over “feminine” values. These are two extremes illustrating the distribution of emotional roles between genders. Masculine values (assertive extreme) include competitiveness, assertiveness, ambition and accumulation of wealth and material assets; whereas, feminine values (modest extreme) are focused on relations and quality of life. What follows from the research by Dimitrow (2014) is that:

- feminine values vary between societies to a lesser extent than masculine values;

- masculine values in particular countries may significantly depart from assertive and competitive ones and be at the opposite end of the spectrum from the feminine values, or else they may be close to the feminine values of modesty and caring for others;

- women in feminine cultures have the same modest and caring values as men, although they are more assertive and competitive in masculine countries, albeit not as much as men.

The aspect of aversion to uncertainty measures the extent of fear of the unknown. Avoiding uncertainty indicates how much the society feels threatened by ambiguous situations, and to what extent they attempt to avoid adhering to strict codes of conduct (Podrug, 2011, p. 39).

The long-term orientation refers to the degree to which the culture has a pragmatic perspective of long and short-term historic orientation. The cultures with long-term orientation tend to value prudence, stamina, perseverance, promoting attempts to build a market share rather than a long-term profit, respect for tradition, exercise of social responsibility and preserving the honour of others in the industry (Rinuastuti *et al.*, 2014, p. 144, 145).

### **Cultural specifics of the European Union countries and their shadow economies**

The culture of the European Union countries is diverse. This is the consequence of religious divisions, geographical location, history, the current political situation, economic doctrine, etc. (Barkley & Eggertsson, 2017, p. 32). Dan (2013) suggests that business attitudes are affected by art, tradition, language, lifestyle and manners, history, museums, values and beliefs, sports, etc.

Ghemawat and Reiche (2011) analyzed 30 countries with respect to Hofstede's criteria. They noticed that cultural diversity makes it more difficult for businesses to cooperate, and poses many challenges to international corporations. Their analysis included 11 member states of the European Union (Denmark, France, Germany, Greece, Italy, The Netherlands, Poland, Portugal, Spain, Sweden and The United Kingdom). They found that these countries varied in terms of many cultural aspects.

Buszko (2017) noted that culture is a significant factor affecting the development of the shadow economy. The researcher claims that if the existing patterns and norms accept the existence of the shadow economy, it finds a space for its activities in the society. Buszko (2019) showed the correlation between the cultural dimensions by Hofstede and the size of shadow economies in the OECD countries (Tab. 1).

Table 1

The correlation between the cultural dimensions by Hofstede and the size  
of shadow economies in the OECD countries

Dimensions	The correlation
Power of distance	0.471476
Individualism-collectivism	-0.366953
Aversion to uncertainty	0.571165
Masculinity-femininity	0.227667

Source: own study based on Buszko (2017).

Buszko's analysis demonstrates that the highest positive correlation (0.57) exists between the aversion to uncertainty and the shadow economy, meaning that a greater fear of discovery of an improper economic conduct coexists with aversion towards and non-acceptance of the shadow economy. An average positive correlation (0.47) was noted for the distrust of the authorities and the shadow economy. A weak negative correlation (0.27) was also observed for individualism and the shadow economy. No correlation was determined for the cultural gender and the shadow economy (Buszko, 2019, p. 66).

### **Dimensions of culture and the size of the shadow economy in the European Union member states**

The European identity has been shaped mostly by a shared cultural heritage (philosophy, art). The common identity became an essential realistic idea after the Second World War. Despite the ongoing process towards cohesion and solidarity among the member states, striving to preserve the cultural diversity of particular countries of the European Union remains an element of integration. There are still many differences between western and eastern Europe (Pellerin-Carlin, 2014, p. 74). Countries also vary in terms of their business culture, according to the dimensions proposed by Hofstede (Tab. 2).

The size of the shadow economy results from several factors. The analysis suggests that the size of the shadow economy in the EU depends on most of the cultural dimensions identified by Hofstede (Tab. 3). The highest positive correlation exists between complacency and the shadow economy (0.71). Average correlations were noticed between the shadow economy and distrust of the authorities, and between aversion to uncertainty (0.52) and individualism (-0.55).

European nations differ in terms of the distrust of the authorities. The countries with the largest distrust are less developed (Bulgaria, Croatia, Romania, Slovakia, Slovenia). These countries, except Slovenia and Slovakia, have vast shadow economies. On the other hand, the countries that have greater trust in the authorities have a high GDP (Austria, Denmark, Ireland, Finland, the Netherlands, Germany). Their common distinctive feature is a small proportion of the shadow economy. It can also be assumed that the degree of the distrust of the authorities may also affect the characteristics and prevalence of the shadow economy.

The countries of the European Union vary in terms of aversion to uncertainty. The average level of this indicator in the EU is 70.59, with a standard deviation of 21.58. The size of the shadow economy usually grows with an increase in aversion to uncertainty. The increase in aversion to uncertainty is usually parallel to the increase in the size of the shadow economy. Four countries where aversion to uncertainty is the lowest (Denmark, Sweden, Ireland, the United

Kingdom) have relatively small shadow economies. On the other hand, there are countries with high aversions to uncertainty, but small shadow economies, like Austria, Belgium, France and the Czech Republic. The countries where both the level of aversion to uncertainty and the shadow economy are high are Bulgaria and Croatia.

Table 2

Comparison of cultural dimensions with the size of the shadow economy in EU Member States in 2016.

Country	Power of distance	Individualism	Masculinity	Aversion to uncertainty	Long-term orientation	Indulgence	The size of the shadow economy [% GDP]
Austria	11	55	79	70	60	63	8.2
Belgium	65	75	54	94	82	57	16.2
Bulgaria	70	30	40	85	69	16	30.6
Croatia	73	33	40	80	58	33	27.7
Czech Republic	57	58	57	74	70	29	15.1
Denmark	18	74	16	23	35	70	12.0
Estonia	40	60	30	60	82	16	26.2
Finland	33	63	26	59	38	57	12.4
France	68	71	43	86	63	48	12.3
Germany	35	67	66	65	83	40	12.2
Great Britain	35	89	66	35	51	69	9.4
Greece	60	35	57	100	45	50	22.4
Hungary	46	80	88	82	58	31	21.9
Ireland	28	70	68	35	24	65	11.3
Italy	50	76	70	75	61	30	20.6
Latvia	44	70	9	63	69	13	23.6
Lithuania	42	60	19	65	82	16	25.8
Luxembourg	40	60	50	70	64	56	8.3
Malta	56	59	47	96	47	66	24.3
Netherlands	38	80	14	53	67	68	9.0
Poland	68	60	64	93	38	29	23.3
Portugal	63	27	31	99	28	33	17.6
Romania	90	30	42	90	52	20	28
Slovakia	100	52	100	51	77	28	14.1
Slovenia	71	27	19	88	49	48	23.3
Spain	57	51	52	86	48	44	18.2
Sweden	31	71	5	29	53	78	13.2

Source: own study based on *Hofstede Insights* (2020).

Table 3

Correlation between dimensions of culture and the size of the shadow economy [% GDP]

Dimensions	Correlations
Power of distance	0.52
Individualism	-0.55
Aversion to uncertainty	0.52
Masculinity	-0.17
long-term orientation	0.11
Indulgence	0.71

Source: own study based on *Hofstede Insights* (2020).

Liberal attitudes prevail in most European countries; according to Hofstede's typology, the countries with the highest level of individualism are the United Kingdom, the Netherlands, Hungary, Italy and Belgium. All of these countries, according to the research, have relatively small shadow economies.

Another cultural dimension is masculinity versus femininity. The average score in the EU member states was 46.37, with a standard deviation of 24.12. No strong correlation between the gender of culture and the size of the shadow economy was observed. In countries having similar cultures in terms of masculinity (Estonia and Portugal, 30 and 31 points, respectively), the difference in the size of the shadow economy reached an 8.6% share of the GDP. The countries which scored the highest were Slovakia (100), Hungary (88), Austria (79) and Italy (70). Among these countries, Austria had the smallest proportion of the shadow economy (8.2% of the GDP) and Hungary had the highest (21.9 of the GDP). However, no correlation was found.

The low correlation between the long-term versus short-term orientation and the shadow economy (0.11) resulted from the fact that most of the researched countries are characterized as having a long-term orientation, but the size of their shadow economies varies.

The European Union member states vary with regard to restraint. The highest negative correlation (-0.71) indicates the significance of this indicator in shaping the shadow economy. The countries with the high restraint tended to have a shadow economy of a moderate size. Such countries were Bulgaria, Estonia, Lithuania and Latvia. Together with an increase in restraint, the size of the shadow economy diminished. The countries with the highest level of restraint were those with a high level of development (Austria, Denmark, the Netherlands, Ireland, Malta, Sweden, and the UK) and a small proportion of the shadow economy.

## Summary

There is a certain correlation between the dimensions of culture identified by Hofstede and the size of the shadow economy. In the case of three indicators (i.e. the size of the shadow economy versus the distance from the authority, individualism and aversion to uncertainty) the observed correlations were moderate (0.52, -0.55, 0.52, respectively). On the other hand, the correlations were low between the size of the shadow economy and masculinity (0.11) and long-term orientation (0.11)

Buszko arrived at similar research results. What transpires from his analysis is that the highest positive correlation (0.57) was between the aversion to uncertainty and the shadow economy. A moderate positive correlation (0.47) was noted between the distance from the authorities and the shadow economy. A weak negative correlation (-0.37) was observed between individualism and the shadow economy. No correlation was found between the cultural gender and the shadow economy.

It is worth mentioning that only one simple indicator (Pearson correlation coefficient) was used and the research can only serve as a basis for further research on the relationship between the shadow economy and the dimensions of culture proposed by Hofstede.

Translated by Jolanta Idźkowska and Paulina Pukin  
Proofreading by Michael Thoene

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