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How much culture is there in corruption? Some thoughts on transformation-cum-collective culture shock in post-communist Poland

1. Introduction

Since 1989 Poland – along with a batch of other East and Central European countries, formerly constituting the Russian influence zone – has been undergoing a long-term, comprehensive and multilevel process of transformation. The process has been described and analysed by many observers as a “non-bloody revolution” [Sztompka 1993 and 2000; Dahrendorf 1990; Trevor-Roper 1989]. Although seemingly non-violent at its origin and evolution, “the revolution” has touched the very essence of East European countries’ identity. Their quest for democracy has been accompanied by simultaneous profound market transformations.

2. The cultural background from which East European countries started their transformation

Mark Casson [1993] observes that “unlike LDCs¹, East European countries typically have the prerequisites for economic development (...) but little more”. He characterises collectively the culture of post communist countries as “low trust and poor judgment [which] provides a very weak basis on which to create a market economy”². Casson [2006] has identified four major dimensions of culture which influence the performance of a group:

- individualism versus collectivism,
- pragmatism versus proceduralism,
- the degree of trust, and
- the level of tension (meaning enough rivalry to create competition).

¹ Less Developed Countries.

² Both quotations come from Casson [1993], p. 431.

He insists that culture is an economic asset and an intangible durable public good. He states that “an ideal culture from an economic point of view is individualistic, pragmatic, high-trust and high-tension” [Casson 2006, p. 394]. Hence his arguments that post-communist countries have a weak base (although varying quite considerably within the group) for the process of creation of the environment conducive to advancement are convincing.

Piotr Sztompka, the Polish sociologist [2000] adds: “It is more difficult to pass over from totalitarianism to democracy than from democracy to totalitarianism. Democracy calls for deep-going, value-oriented changes in the public mentality it calls for time”. As he elaborates his description of the legacy of communism, he introduces a term “civilisational incompetence”, which he also metaphorically calls “a wall in our culture”: “I would claim that there is a more basic *wall in our culture* of which the conduct and mentality of post-Communist people are just the symptoms or reflections. This cultural barrier has been raised by several decades of *real socialism*”³.

In the section called “The Anatomy of Civilisational Incompetence” he first describes what constitutes the bases for an advanced society. “For a developed, democratic and market society to operate, several resources seem indispensable. Capital, technology, infrastructure, skilled labour force, a robust middle class, an efficient civil service, a professional political elite would be some obvious examples. But there is also a less obvious, underlying cultural resource which may be called *civilisational competence*. By this, (...) I mean a complex set of rules, norms and values, habits and reflexes, codes and matrixes, blueprints and formats the skilful and semi-automatic mastery of which is a prerequisite for participation in modern civilisation. Four substantive sub-categories of civilisational competence coincide with four main areas of modern, developed society for which they are immediately relevant: economy, polity, social consciousness and everyday life. First, there is the *enterprise culture*, indispensable for participation in market economy. Some of its components include: innovative persistence, achievement orientation, individualistic competitiveness, rational calculation, and the like. Second, there is the *civic culture*, indispensable for participation in democratic polity. Some of its components include: political activism, readiness to participate, concern with public issues, rules of law, discipline, respect for opponents, compliance with the majority, and the like. Third, there is the *discursive culture*, indispensable for participation in free intellectual flow. Some of its components include: tolerance, open-mindedness, acceptance of diversity and pluralism, scepticism, criticism and the like. And four, there is the *everyday culture*, indispensable for daily existence in advanced, urbanised, technologically saturated and consumer-oriented society. Some of its components include:

³ All Sztompka citations on this page come from: <http://www.ces.uj.edu.pl/sztompka/competence.htm>. Pages are not numbered.

neatness, cleanliness, orderliness, punctuality, health care, fitness, facilities to handle mechanical devices and the like. (...) Getting rid of the cultural legacy of real socialism and building civilisational competence is, I submit, the central task facing Eastern and Central European societies in the 1990. It is a prerequisite, a necessary condition for attaining *true modernity* and authentic democracy, to have a functioning market and an open society. The task is onerous and protracted but probably attainable”⁴.

3. The concept of “collective culture shock”

Feichtinger and Fink [1998] have formulated a theory of „collective culture shock”. They built their theory on the achievements of anthropologists and cross-cultural researchers. They used the definition and the symptoms of the individual culture shock (a prolonged stress reaction to the new situation and milieu) which they describe as: “a well known and evidenced phenomenon. It describes the psychological and also physical reactions of a person staying abroad. These reactions are the result of confrontation with a foreign culture”. Their study follows on from a theory of culture shock, first described and documented by Sverre Lysgaard [1955] and Kalervo Oberg [1960]. Feichtinger and Fink have moved the phenomenon onto a social level – the level “of society as a whole. This collective culture shock influences management and business relations and causes problems”. In contradiction to how both Casson and Sztompka perceive the core of the transformational problems of East European countries Feichtinger and Fink claim that their “(...) theory suggests that cultural processes and features in transition countries that are usually attributed to the communist heritage are the result of collective culture shock”⁵.

I would not want to attribute the transition pains of post-communist countries categorically either to one (collective culture shock) or the other (communist legacy) influence. I accept that the transformation process together with its problems owes a great deal to the communist legacy and acknowledges the contribution of Feichtinger and Fink in identifying that change has provoked within post-communist societies reactions similar to those of a culture shock of an individual sojourner. I would like to argue however that the transformation process is accumulative, multiplicative and developing in a forwards-backwards manner. I would like to propose that certain societal features may indicate the intensity of the collective shock. My proposition is that these features are: the level of corruption, the values for Power Distance and Individualism – as they are defined in the following sections of the paper. The author would also like to propose that there is a correlation between corruption (as measured by the

⁴ Sztompka <http://www.ces.uj.edu.pl/sztompka/competence.htm>.

⁵ All quotations on collective culture shock in this section come from Feichtinger, Fink [1998]. The document was retrieved in an one-page version.

Transparency International Corruption Perceptions Index) and Individualism and Power Distance [as defined by Hofstede 1980] respectively.

4. Trade-offs between private and public rights as features enhancing the development of modern advanced countries

Ernesto Screpanti and Stefano Zamagni [2005] summarize the development of contemporary (post II World War) mainstream economics as largely concerned with the issues of what makes a modern technically advanced and economically sophisticated society tick. They also point out that contemporary economic sciences seem to prove that “The principles of personal interest and mercantile morality are inadequate as instruments of social organization when phenomena of social interaction are massively present, as in the case of the highly industrialized modern economies” [Screpanti, Zamagni 2005, p. 403].

A succession of thinkers: [Arrow 1951; Hardin 1968; Coase 1960; Akerlof 1970; Sen 1970; Holmes and Sustain 1998 to name but a few] have identified and discussed issues (pervasive in modern advanced societies) such as rights as well as their (negotiated) sharing and/or distribution (including rights to information), public and private ownership, and distributive justice. Such phenomena are placed within a complex web of social interaction and they are at the core of development in its advanced stages. Ernesto Screpanti and Stefano Zamagni [2005] conclude that that a “richer” code is necessary to achieve both private and public goals, one which “besides honesty and trust, includes benevolence” [Screpanti, Zamagni 2005, p. 401].

When one contrasts such a state of development with the stages of transformation taking place in East European countries which are dealing with “civilisational incompetence”, communist “cultural legacy” and “collective culture shock” one cannot help but ask: what, in fact, are the cultural-cum-economic dimensions in East European countries (and specifically Poland) and what influence are they having? What is more: how can they be measured and compared, so that the discussion could be more substantial?

5. Culture’s impact in economics: how can be measured?

There have been several attempts to link economics with culture [Casson 1993, 2006, Landes 1998, Wilk 1996] and establish a causal relationship. One of the most recent propositions has been to establish measurable tools to test the reciprocal links between culture and economic output on the basis of World Values Survey and national census type documents. Guiso, Sapienza and Zingales [2006] have isolated three of culture’s features while they define culture as those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation. They use the results of surveys to test the influence of culture (perceived as the ethnic, religious and social causal link). They appreciate that the definition is not comprehensive but they believe those dimensions of culture can impact economic outcomes. Their analysis includes the

impact of culture on expectations and preferences, the effect of religion on trust around the world and people's preferences for redistribution. Most studies they quote to support their arguments have themselves used survey data, such as the World Values Survey.

Such an approach (irrespective of its limitations) – i.e., one that isolates measurable features of culture (also via declarative statements applied in social surveys) – has appealed to the author of this paper. She has decided to look at three culture indicators which:

- have been well developed,
 - methodologically credible,
 - have withstood the test of time (over a quarter of a century in the case of Hofstede [1980] and over 10 years in the case of Corruption Perceptions Index – CPI was first published in 1995),
 - have been repeated (revised) regularly,
 - have been carried out by reputable institutions (backed up with their reputation and credibility as well as academic rigour),
- namely Hofstede's culture dimensions, and to be more precise two of them: Power Distance and Individualism, and Transparency International Corruption Perceptions Index.

6. Cultural Dimensions defined

The framework of cultural dimensions set forth by Hofstede [1980] was chosen as it offers measurable cultural criteria. The culture features listed by his model are unambiguously identifiable and measurable. That is why the I decided to apply Hofstede's model, although it is only one of the several classifications and typologies of cultures which have been put forward in the past two or three decades. Alongside Trompenaars & Hampden-Turner and Schwartz' work Hofstede's research [1980] stands out as the most well known and cited⁶ (although also vehemently criticized)⁷.

Geert Hofstede's research on culture was based on a large database of employee values collected by IBM between 1967 and 1973 covering more than 70 countries. The first report on 40 countries was published in 1980. In 1983

⁶ "Whether we use unadjusted or adjusted citations, Dunning, Porter, Vernon, Casson, Rugman, and Hofstede have had the greatest influence on international business research during the period 1984–1993" [Chandy 1994, p. 727]. "The classic work of Hofstede [1980] has revolutionized the research on culture and IB. (...) The validity of the cultural dimensions identified by Hofstede has been controversial (...), but they have provided a broad framework that has inspired much IB research". [Leung et al. 2005, p. 365].

⁷ The authors have decided to use Hofstede's framework for the purpose of the exercises described in this paper intentionally, since it offers quantified values for cultures. The arguments in its favour are: cultural dimensions as specified by Hofstede have a numerical value and can be compared; and the model has thus far withstood the test of time. The authors have decided to disregard frequent criticisms that have surrounded Hofstede's framework since its conception.

the analysis covered 50 countries and three regions. The sample included seven different levels of occupation, from managers to administrative personnel. Altogether there were more than 116,000 questionnaires in 20 languages.

The survey instrument (the questionnaire) included 160 questions, of which 63, mainly pertaining to values, were used in the cross-cultural analysis.

In the subsequent editions of Hofstede's works since 2001, scores are listed for 74 countries, populations and regions (i.e., the Middle East and Northern Africa, called by Hofstede the "Arab World"; East Africa and West Africa). These scores are partly based on replications and extensions of the original IBM study. The authors of this paper have sourced the data for their calculations (as presented later in the paper) from the official Geert Hofstede on-line research resource (<http://www.geert-hofstede.com>) – as retrieved in December 2007. The data (i.e., the scores) are from 2004 (as stated on the website).

We have decided to include brief definitions of the cultural dimensions, as proposed by Hofstede. Individualism (IDV) focuses on the degree the society reinforces individual or collective achievement and interpersonal relationships. Power Distance Index (PDI) focuses on the degree of equality, or inequality, between people in the country's society. Masculinity (MAS) focuses on the degree the society reinforces, or does not reinforce, the traditional masculine work role model of male achievement, control, and power. Uncertainty Avoidance Index (UAI) focuses on the level of tolerance for uncertainty and ambiguity within the society, e.g. unstructured situations. Long Term Orientation was later added. It has been established only for 23 countries. It is based on Confucian dynamism. Values associated with Long Term Orientation are thrift and perseverance; values associated with Short Term Orientation are respect for tradition, fulfilling social obligations, and protecting one's 'face'.

I have processed all four culture dimensions for the purpose of my study, but only two: Individualism (IDV) and Power Distance (PD) have been found to have applicability in the model. The other two dimensions (Uncertainty Avoidance and Masculinity) are not differentiable enough to allow for justifiable hypotheses or even speculations about their possible correlation with corruption while using the instruments applied in this study – as the model proves. The fifth dimension, Long Time Orientation (LTO) has been measured for only a handful of countries and as such has been excluded by the author from the set of potential variables.

Individualism (IDV) focuses on the degree the society accepts and reinforces individual or collective achievement and interpersonal relationships.

Power Distance Index (PDI) focuses on the degree of equality, or inequality, between people in the country's society. It is the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally.

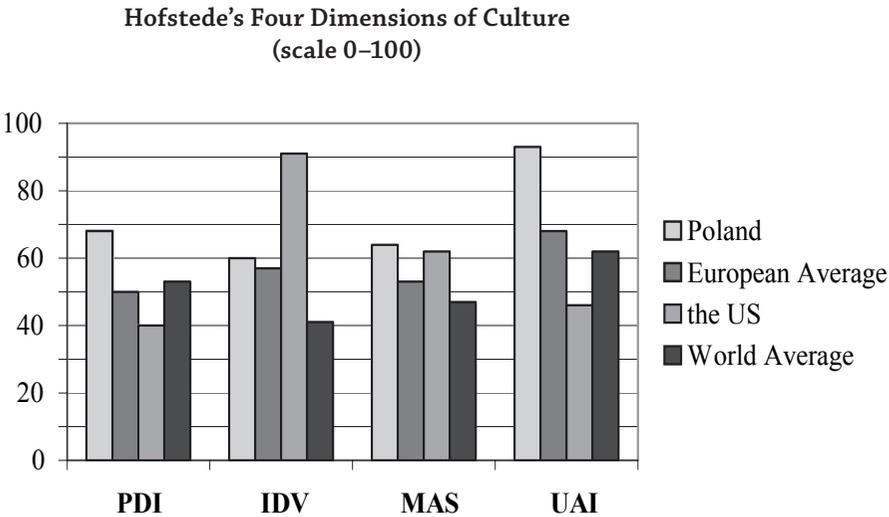
The values for Poland were computed in the 1990s [Nasierowski and Mięka 1998; Kolman et al. 1999] and further applied by Zduńczyk and Blenkinsopp

[2007] in the context of enhancing creativity and innovation in partly or fully foreign-owned companies operating in Poland [2007].

The preliminary analysis of cultural values for Poland indicates that it is, in fact, one of the very few countries which Hofstede identified as exceptions (other exceptions are: France, Belgium, Costa Rica). Poland has both a (relatively) high Power Distance value (68) and a high Uncertainty Avoidance Index (93). Most Western countries have these two values negatively or weakly correlated [Hofstede 1984, pp. 214 and 215]. This somewhat unique feature makes Poland a very interesting object of investigation.

Figures 1 and 2 illustrate Hofstede’s dimensions in a compact comparative way vis-à-vis Poland (Poland vs. the US, Europe and the World).

Figure 1. A comparative view of Hofstede’s cultural dimensions: Poland vs European Average, the US and the World Average.



Source: compiled and computed on the basis of <http://www.geert-hofstede.com>.

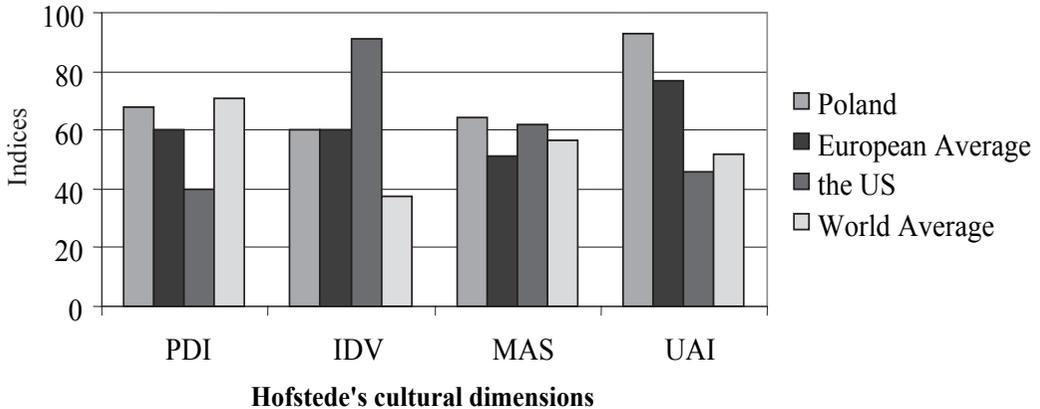
Figure 1 presents a comparative view of PD, MAS, IDV and UAI of Poland, Europe, the US and the World where nominal values of the indices are used. Only the scores of the countries for which the values have been calculated by Hofstede are presented. LTO is not included in our figures because it would be impossible to aggregate it the same way the calculations have been done for the other dimensions (only 23 countries have their LTO listed). The comparison shows that Poland indeed has higher values than the three other entities, except for the US which is the most individualistic country in the world.

The situation changes but only vis-à-vis relative differences when the indices are weighted by the population sizes of the respective countries and aggregates.

Poland still stands out as a country with above average values for PDI, MAS and UAI.

Figure 2. A comparative view of Hofstede's cultural dimensions: Poland vs European Average, the US and the World Average. Dimensions indices are weighted by the respective populations of the aggregates, i.e., Europe, the US and the World.

A comparative view of Hofstede's dimensions



Source: own computation on the basis of <http://www.geert-hofstede.com> and United Nations Statistics Division, Demographic and Social Statistics, <http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm>.

7. Corruption Perception defined

The other value analyzed as a (dependent) variable in this paper is Corruption Perception. A high degree and extent of corruption is a symptom (or rather a cluster of symptoms indicating) of "civilisational incompetence" [as defined by Sztompka, 2000]. I have used the information published by Transparency International. I have processed the data included in the 2007 Global Corruption Report as well as the TI additional background data, and Corruption Perceptions Index 2007 which includes the table of rankings (http://www.transparency.org/policy_research/surveys_indices/cpi/2007)⁸.

⁸ In her calculations the author has strictly applied the proviso quoted by the authors of the ranking. Global Corruption Report "lists all countries where data on perceived levels of corruption were available in alphabetical order. Only those countries with at least three sources were regarded as measured with sufficient reliability and included in the Transparency International Corruption Perceptions Index. Countries with less than three sources are measured less precisely". The author has used this proviso while calculating the mean score values of corruption perception for the three regions: Arab World, East Africa and West Africa.

The corruption perception measurement methodology has frequently been criticised. The author has decided to use the data (i.e., the ranking of countries according to how corruption is perceived in a given country) used by Transparency International because the results – similarly to Hofstede’s dimensions – have been published regularly, the methodology has been put to scrutiny [cf. Kaufmann, Kraay and Mastruzzi 2006] and it has been put to the test of time. The methodology, described in detail in the Report (together with the comments from Johann Graf Lambsdorf⁹) and in particular the six myths discussed by Kaufmann, Kraay and Mastruzzi have been sufficient grounds for the author to appreciate the value of the measurements and subsequently accept them for calculations.

The author has particularly appreciated the comment from Kaufmann, Kraay and Mastruzzi that introducing institutions (such as an anti-corruption commission) in a country does not necessarily follow in the sphere of practice, i.e., if it has had an impact on corruption.

Poland ranks 61 out of 179 countries in the TI Corruption Perceptions Index 2007. The rankings for the years prior to this have been disregarded for the following reasons:

- the other variables (PD and IDV) are from 2004, in other words the sources for the data are not synchronized as per time of measurement,
- the placement on the TI list does not change dramatically,
- culture features are stable and only change slowly [Becker 1996, Hofstede 1980].

8. Culture quantified and co-related

A general observation of the position of a country in the Corruption Perception ranking is not sufficient to speculate about some possible links between a country’s culture and their propensity for corruption. Generally speaking, the higher the country’s position in the index the better off economically that country

⁹ “The Corruption Perceptions Index (CPI), now in its 12th year, ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, making use of surveys of business people and assessments by country analysts.

The CPI 2006 ranks 163 countries (an increase from 159 countries last year), and draws on 12 different polls and surveys from nine independent institutions, using data compiled between 2005 and 2006. Data from the following sources were included:

- Country Policy and Institutional Assessment by the IDA and IBRD (World Bank),
- Economist Intelligence Unit,
- Freedom House ‘Nations in Transit’,
- International Institute for Management Development (in Lausanne),
- Merchant International Group Limited (in London),
- Political and Economic Risk Consultancy (in Hong Kong),
- United Nations Commission for Africa,
- World Economic Forum (WEF),
- World Markets Research Centre (in London)”. A comment by Johann Graf Lambsdorff, TI Global Corruption Report 2007, p. 324.

is doing. There is also a straightforward *a contrario* conclusion, i.e., that the lower the country's ranking in the index, the worse off they perform economically. The major challenge seems to lie in constructing the conceptual way which would show that since corruption is linked to poor economic performance and – on the other hand – corruption depends on the cultural conditioning of a country, corruption and economic performance go hand in hand. One way of showing this is finding out whether corruption (represented in measurable units) and culture (represented as quantified values) correlate. One formal way to do this is to regress culture on corruption. The author has built a regression model, where the variables are CPI, PDI and IDV. The most obvious observation the author of this paper has made in her work on culture related issues is that there is a relation between Power Distance and corruption. Power Distance (in many cases) could correspond (although not in a straightforward way) to what Casson specified as a “degree of trust”, a feature which – according to Casson – needs to be present in abundance if a country is to develop successfully. The other observation the author has made is that Individualism and degrees of corruption seem to coincide. Individualism could be described as reflecting both Casson's individualism and degree of tension. These two cultural dimensions have seemed to the author the most likely variables which could substantially “explain” corruption. However, there are two other features (three, in fact, but LTO will not be discussed here since it was only calculated for 28 countries or aggregates) in the Hofstede model. Therefore the author has undertaken to build a regression model with all five variables, and test how the regression responds.

Based on the conclusions drawn from the literature and her observation of the CPI and Hofstede's indices, the author would like to propose the following two hypotheses:

H1: There is a positive relation between Power Distance and Corruption Perception, in other words the countries where Power Distance is high tend to have high values for Corruption Perception. In reality the coefficient will have a negative value, since the ranking of corruption is done from top to bottom, i.e., the countries with the lowest corruption level are nearest to the top of the list.

Translated into the econometric language, the hypothesis is represented by the customary pair of the null hypothesis $H1_0$, and the alternative hypothesis $H1_1$:

$$H1_0: \beta_1 = 0 \quad \beta(\text{PDI, CP}) = 0$$

$$H1_1: \beta_1 < 0 \quad \beta(\text{PDI, CP}) < 0$$

As the results will show subsequently the null hypothesis is rejected $H1$ (the alternative hypothesis) is accepted – in this case that $\beta(\text{PDI, CP}) < 0$.

H2: There is a negative correlation between Individualism and Corruption Perception, in other words countries which score high on Individualism tend to have low values for Corruption Perception. The coefficient in this equation will have a positive mark, since the ranking runs from top to bottom, as the more “individualistic” the “cleanest” countries will also tend to be the “cleanest”.

Translated into the econometric language, this hypothesis is represented by the customary pair of the null hypothesis $H2_0$, and the alternative hypothesis $H2_1$:

$$H2_0: \beta_1 = 0 \quad \beta (\text{IDV, CP}) = 0$$

$$H2_1: \beta_1 > 0 \quad \beta (\text{IDV, CP}) > 0$$

As the results will show subsequently the null hypothesis must be rejected and $H2_1$ (the alternative hypothesis) must be accepted – in this case: $\beta (\text{IDV, CP}) > 0$.

Individual linear regressions (Models 1 and 2 respectively) represented by H1 and H2 are followed by a model where all four cultural dimensions (PDI, IDV, MAS and UAI) are regressed on CPI (Model 3). Model 3 proves MAS and UAI are not do not have significant influence on the CPI variable, so in the subsequent model, a multiple regression model (Model 4) only PDI and IDV are regressed on CPI. White's test for heteroskedasticity for Models 1, 2 and 4 proves that the models are homoskedastic, i.e., that the probability density function for the errors does not change as the dependent variables change.

All regressions use 65 observations (although there are 65 countries and three areas in the Hofstede model), because the author has had to drop the three aggregated areas, as it would be incorrect to calculate mean corruption values for Arab World, East Africa and West Africa – thus interfering with the Report. These areas – in contrast to Hofstede's methodology – have **not** been treated by the authors of the CPI reports as aggregates.

Model 1: PDI regressed on CPP, OLS estimates using 65 observations from 1–68

Missing or incomplete observations dropped: 3

Dependent variable: CPI

VARIABLE	COEFFICIENT	STD. ERROR	T STAT	P-VALUE
const	9,59311	0,634148	15,128	<0,00001 ***
PDI	-0,0709474	0,0101338	-7,001	<0,00001 ***

Mean of dependent variable = 5,43341

Standard deviation of dep. var. = 2,3641

Sum of squared residuals = 201,176

Standard error of residuals = 1,78697

Unadjusted R-squared = 0,43758

Adjusted R-squared = 0,42865

Degrees of freedom = 63

Log-likelihood = -128,949

Akaike information criterion (AIC) = 261,899

Schwarz Bayesian criterion (BIC) = 266,247

Hannan-Quinn criterion (HQC) = 263,614

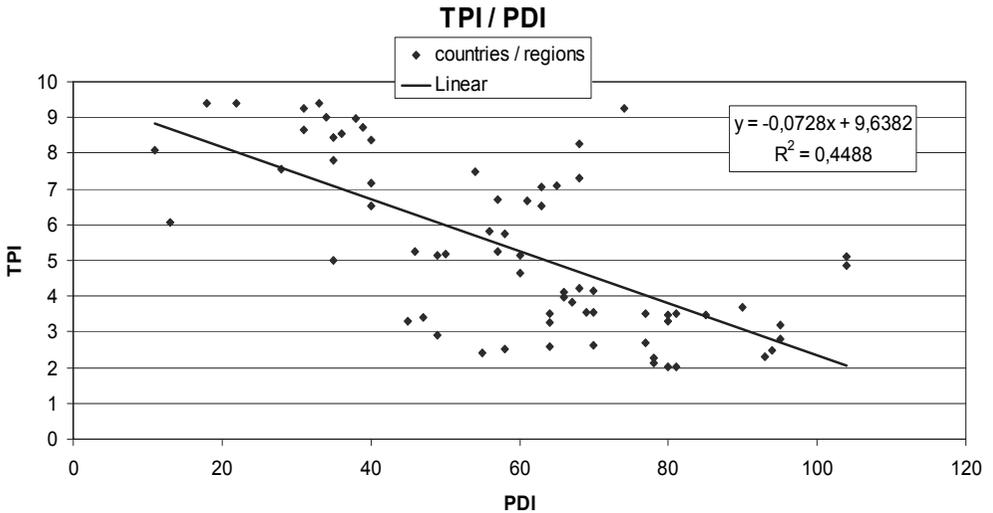
White's test for heteroskedasticity -

Null hypothesis: heteroskedasticity not present

Test statistic: LM = 0,147882

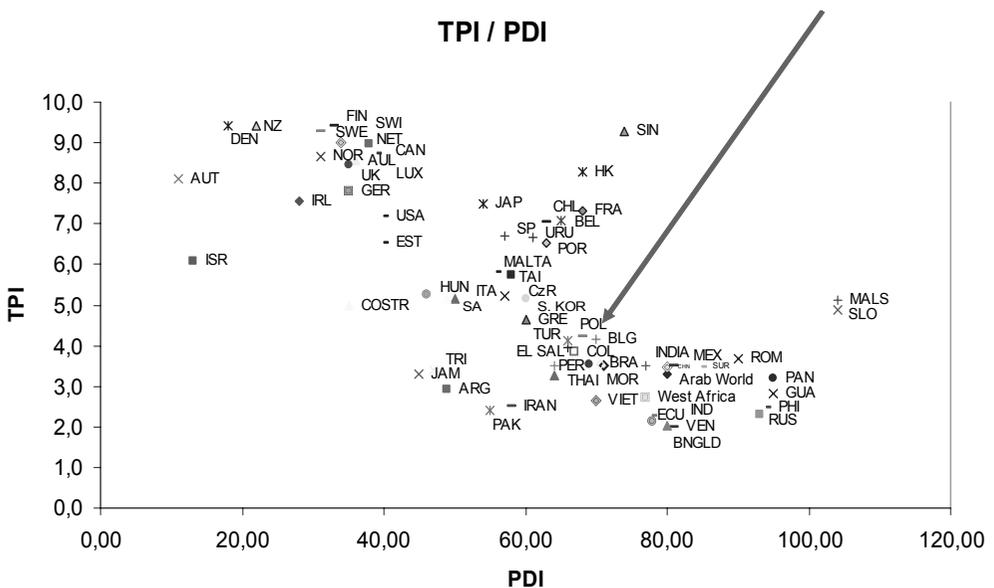
with p-value = $P(\text{Chi-Square}(2) > 0,147882) = 0,928726$

Figure 3. Corruption versus Power Distance, a linear relationship.



Sources: CPI 2007, <http://www.geert-hofstede.com>.

Figure 4. Corruption (TPI – Transparency Perception Index) versus Power Distance (PDI – Power Distance Index), countries and country aggregates (Arab World, East Africa, West Africa).



Sources: TI CPI 2007, www.geert-hofstede.com.

Notes (these notes apply also to the following figures): There are exactly as many countries as there are listed in the Hofstede classification, although the number listed in the CPI 2007 list is significantly higher (179). TPI country aggregate values for the regions (Arab World, East Africa and West Africa) are in accordance with Hofstede's specification of the regions and have been calculated by the author using IT corruption perception mean scores for the relevant countries.

Arab World: Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia

East Africa: Ethiopia, Kenya, Tanzania, Zambia

West Africa: Ghana, Nigeria, Sierra Leone

Model 2: IDV regressed on CPI, OLS estimates using 65 observations from 1–68

Missing or incomplete observations dropped: 3

Dependent variable: CPI

VARIABLE	COEFFICIENT	STD. ERROR	T STAT	P-VALUE
const	2,58350	0,459207	5,626	<0,00001 ***
IDV	0,0646126	0,00913093	7,076	<0,00001 ***

Mean of dependent variable = 5,43341

Standard deviation of dep. var. = 2,3641

Sum of squared residuals = 199,294

Standard error of residuals = 1,77859

Unadjusted R-squared = 0,44284

Adjusted R-squared = 0,43399

Degrees of freedom = 63

Log-likelihood = -128,644

Akaike information criterion (AIC) = 261,288

Schwarz Bayesian criterion (BIC) = 265,636

Hannan-Quinn criterion (HQC) = 263,003

White's test for heteroskedasticity -

Null hypothesis: heteroskedasticity not present

Test statistic: LM = 1,85531

with p-value = $P(\text{Chi-Square}(2) > 1,85531) = 0,395481$

Figure 5. Corruption versus Individualism. Linear relationship.

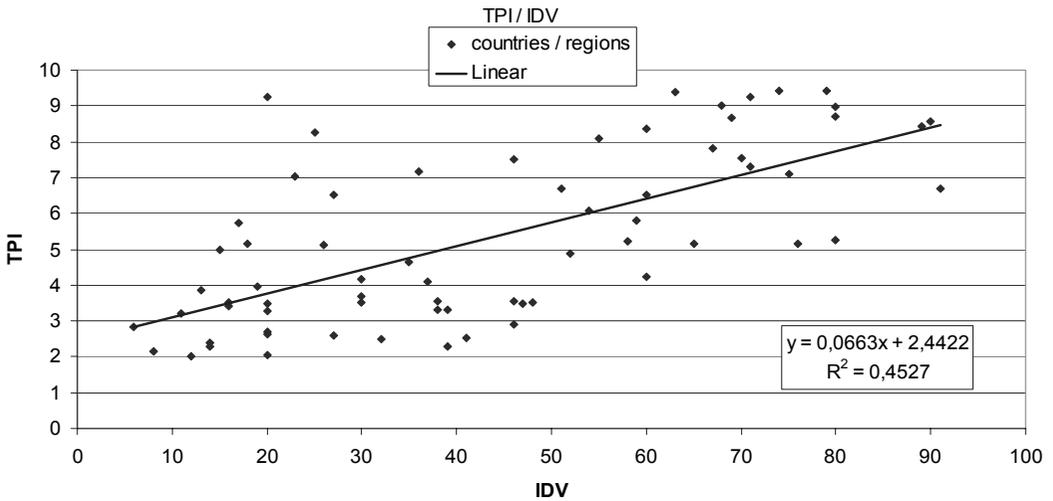
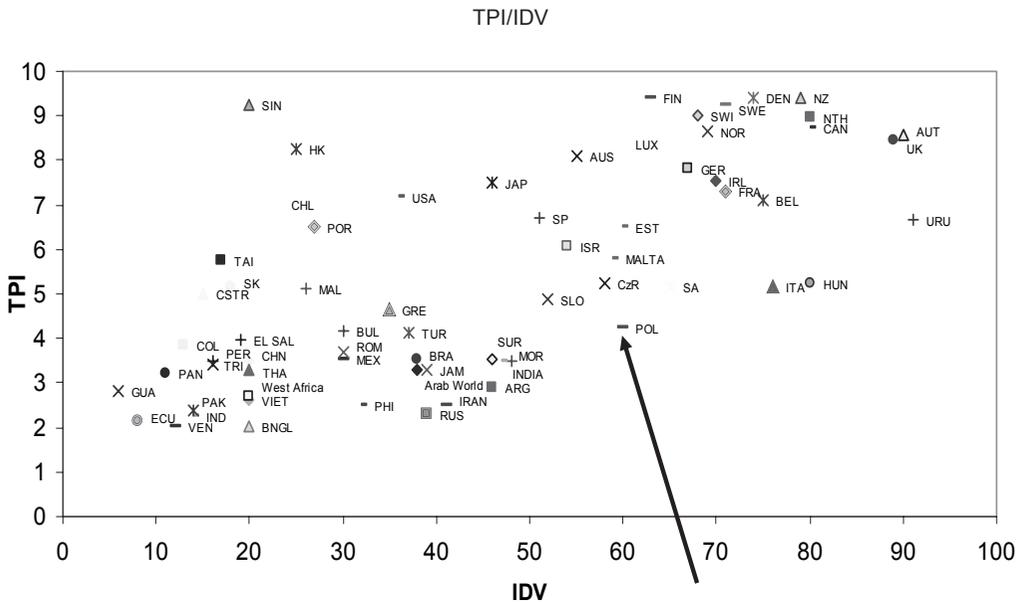


Figure 6. Corruption versus Individualism, countries and country aggregates.



Sources: CPI 2007, <http://www.geert-hofstede.com>.

Model 3: PDI, IDV, MAS and UAI regressed on CPI, OLS estimates using 65 observations from 1–68

Missing or incomplete observations dropped: 3

Dependent variable: CPI

VARIABLE	COEFFICIENT	STD. ERROR	T STAT	P-VALUE
const	7,61528	1,14477	6,652	<0,00001 ***
IDV	0,0443365	0,0103173	4,297	0,00006 ***
PDI	-0,0360291	0,0115356	-3,123	0,00275 ***
MAS	-0,0191591	0,0105687	-1,813	0,07486 *
UAI	-0,0158634	0,00820171	-1,934	0,05781 *

Mean of dependent variable = 5,43341

Standard deviation of dep. var. = 2,3641

Sum of squared residuals = 145,045

Standard error of residuals = 1,55481

Unadjusted R-squared = 0,59450

Adjusted R-squared = 0,56747

F-statistic (4, 60) = 21,9913 (p-value < 0,00001)

Log-likelihood = -118,317

Akaike information criterion (AIC) = 246,635

Schwarz Bayesian criterion (BIC) = 257,507

Hannan-Quinn criterion (HQC) = 250,924

White's test for heteroskedasticity -

Null hypothesis: heteroskedasticity not present

Test statistic: LM = 36,0359

with p-value = $P(\text{Chi-Square}(14) > 36,0359) = 0,00103061$

Model 4: PDI and IDV regressed on CPI, OLS estimates using 65 observations from 1–68

Missing or incomplete observations dropped: 3

Dependent variable: CPI

VARIABLE	COEFFICIENT	STD. ERROR	T STAT	P-VALUE
const	6,20784	1,04298	5,9520	<0,00001 ***
PDI	-0,0437251	0,011533	-3,7913	0,00034 ***
IDV	0,0405647	0,0104406	3,8853	0,00025 ***

Mean of dependent variable = 5,43341

Standard deviation of dep. var. = 2,3641

Sum of squared residuals = 161,786

Standard error of residuals = 1,61538

Unadjusted $R^2 = 0,54770$

Adjusted $R^2 = 0,53311$

F-statistic (2, 62) = 37,5385 (p-value < 0,00001)

Log-likelihood = -121,867

Akaike information criterion = 249,734

Schwarz Bayesian criterion = 256,258

Hannan-Quinn criterion = 252,308

Hite's test for heteroskedasticity

OLS estimates using 65 observations from 1-68

Missing or incomplete observations dropped: 3

Dependent variable: $uhat^2$

VARIABLE	COEFFICIENT	STD. ERROR	T STAT	P-VALUE
const	-6,07709	10,0647	-0,604	0,54829
PDI	0,212368	0,205968	1,031	0,30672
IDV	0,185545	0,221311	0,838	0,40520
sq_PDI	-0,00137336	0,00117924	-1,165	0,24886
X2_X3	-0,00128455	0,00198736	-0,646	0,52055
sq_IDV	-0,00149516	0,00141879	-1,054	0,29626

Unadjusted R-squared = 0,05237

Test statistic: $TR^2 = 3,404244$,

with p-value = $P(\text{Chi-square}(5) > 3,404244) = 0,637924$

9. Results

The author proposes the following interpretations and conclusions after the analysis of the above relationships, illustrated by the models:

a) PD correlates negatively with CP (corruption perception). The higher the PD value in a country, the worse its rank in the CPI. The slope coefficient of the linear relationship is about -0.07 (Model 1). This means that a unit change (decrease) in Power Distance (as theoretical as it may sound) will correspond to at least a 0.07 rise in the corruption perception rank.

b) IDV correlates positively with CPI. The higher the Individualism in a country, the "better" its value in TI CPI. The slope of the coefficient of the linear relationship is about 0.06 (Model 2). This means that a unit change (increase) in Individualism (as theoretical as it may sound) will correspond to at least a 0.06 rise in the corruption perception rank.

c) The value of R squared is around 45% in both cases (44,88% for PDI and 45,27% for IDV), which means the level of adjustment of the proposed regression functions to empirical data is average. That is, 45 % of the variation in TPI is explained by the model while 55% is explained by factors not accounted for in the model (random factors). The values below 60–70% (the usual threshold of

R squared considered sufficient) stem primarily from the isolated cases with extreme values (such as Israel or Singapore for PDI, and Singapore and Hong Kong for IDV). Such a result could also suggest that the regression function should include more variables (other than cultural dimensions) than just PDI / IDV or that the function should be non-linear.

d) The negative relationship between PD and corruption perception is slightly stronger than the positive relationship between IDV and corruption perception. This could indicate that high Power Distance in a country (which – according to Hofstede – could lead to the abuse of power [meaning: extortion of bribes as well as nepotism]) would be a stronger “culturally conditioned” factor than Individualism.

e) Masculinity/Femininity and Uncertainty Avoidance do not have a significant influence on the corruption (p value of 0,07486 and 0,05781 respectively) (Model 3). Therefore they are dropped from the model altogether.

f) Model 4 (PDI and IDV regressed on CPI) has the highest intercept value (5,62360), and the adjusted R-squared of 0,64256. This means that 64% of the variation of TPI is explained by the model, while 36% is explained by factors not accounted for in the model (random factors).

10. Conclusions

Based on the analysis of the model, it is possible to speculate a conclusion that if in a country Power Distance is high, Individualism is high and corruption level unsatisfactory (61 as in the case of Poland), one could expect that this country’s citizens will respond to the “unfavourable environment” (especially in mid- to long term). One of the possible reactions of the citizens – especially when given such an opportunity as open labour markets in a few countries considered as “desirable” – will be to emigrate¹⁰, irrespective of the high costs of such an action¹¹.

If one endogenizes such migration “push” and “pull” factors as:
– the “echo” generation size¹², i.e., the numerous cohorts of “the children of the children of the Martial Law”,

¹⁰ Given that the natural U-shape migration barriers, such as the necessity to get enough training to respond to the host country’s needs are taken care of (cf. favourable rates of access to education in Poland) and given the accessibility of cheap airlines (within Europe).

¹¹ Becker [1996, p. 16] writes: “Individuals have less control over their culture than over other social capital. They cannot alter their ethnicity, race or family history, and only with difficulty can they change their country or religion. Because of the difficulty of changing culture and its low depreciation rate, culture is largely a ‘given’ to individuals throughout their lifetimes”.

¹² Initial “boom” in Poland as experienced – similarly to other European countries – in the post-II WW period and the following “bust” under the 1982–85 (overlapping with the imposition of the Martial Law in Poland).

– the high unemployment rate in Poland at the beginning of 2000s understood as a “merely” (macro)economic indicator (meaning not linked with “culture”),

– respective decisions of the UK, Ireland and Sweden to grant the 2004 EU entrants (among them Poland) the right to free labor movement as well as institutional incentives on their side (such as the British Workers Registration Scheme which gives access to National Insurance Number to any legal migrant), the size of the post-May 1, 2004 migration from Poland could be linked to the culture-cum-economics issues *ceteris paribus*.

The other possible speculation is that if the three variables do indeed interact amongst themselves (while the intensity of cultural values remains relatively stable (Hofstede 1980, i.e., Poland’s values for Power Distance and Individualism will remain more or less constant), the 64% of the influence of cultural dimensions on corruption is a significant factor. High Power Distance may particularly contribute to reinforcing a long-term “unfavourable quality of life climate” and – in consequence – affect Poles’ decisions (with long-term consequences) re: migration, Total Fertility Rate and willingness to apply themselves to business, as they are all high risk-laden.

The reciprocal influence and interaction between the three variables as well as establishing which one of them tends to have a decisive role in the decision-making process (e.g., to emigrate) and under what circumstances (e.g., which values of the variables in combination (and in which order) tend to persuade the citizens to emigrate versus stay home or emigrate versus stay home but have fewer children) seems to be an interesting area for investigation in the future.

11. Recommendations for researchers and practitioners

There seems no doubt that there is a need for further and more detailed study of the four prerequisites of *civilisational competence* (as defined in the opening section of the paper), characterised by:

enterprise culture

civic culture

discursive culture

everyday culture

which Sztompka listed as necessary for attaining true modernity in Poland. The obvious implication for researchers (e.g., political scientists, law theoreticians, economic thought theoreticians, anthropologists) would be to define the areas in which the Polish state and its public administration seem to lag behind the well developed countries. Another task would be to point out the gaps in the law, administrative regulations as well as the practice of everyday functioning in Poland which can be modified and improved, so as to ease the everyday existence within the state. On the other hand, the task for demographers, statisticians and economists is to watch the unfavourable trends within the population (such as the low Total Fertility Rate and migration figures) and try to identify whether they are indeed correlated with civilisational incompetence. Economists should

be aware of the cultural dimensions indices and how they may affect economic performance.

Policy makers should follow the recommendations of the researchers in areas such as: administrative law, public administration practice, reforms in education and public health service as well as civil code and commercial codes of practices.

Abstract

The paper's objective is to show how cultural features may interact with economic behaviour. The concepts of "civilisational incompetence" and "collective culture shock" are discussed to highlight a number of specific issues faced by post-communist countries. Corruption (presented on the basis of the Corruption Perception Index) is symptomatic of civilisational incompetence. Quantified cultural dimensions are used to assess Poland's cultural make-up.

A simple regression model (in three parts) is built where numerical values for Power Distance and Individualism (as set forth by Hofstede) are positioned against the values of Transparency International Corruption Perceptions Index. Quantified cultural dimensions are an independent variable. The dependent variable is the perception of corruption. There seems to be a positive relation between corruption and PD, and a negative relation between corruption and IDV. Economic implications are listed. The case of Poland is presented as a testing ground for researchers, practitioners, public opinion and policy makers.

References

- Akerlof, G.A. 1970, *The Market for Lemons*, "Quarterly Journal of Economics", No. 84, pp. 488–500.
- Arrow, K. 1951, *Social Choice and Individual Values*, Wiley, New York.
- Becker, G. 1996, *Preferences and Values* [in:] Becker G. (ed.), *Accounting for Taste*, Harvard University Press, Cambridge.
- Casson, M. 1993, *Cultural Determinants of Economic Performance*, "Journal of Comparative Economics", No. 17, pp. 418–442.
- Casson, M. 2006, *Culture and Economic Performance* [in:] *Handbook of the Economics of Art and Culture*, Vol. I, (ed. by) Ginsburgh, V.A., Throsby, D., Elsevier, B.V, Amsterdam.
- Castles, S., Miller, M. 2003, *The Age of Migration*, Palgrave, New York.
- Chandy, P.R., Williams, T.G.E. 1994, *The impact of journals and authors on international business research: a citational analysis of JIBS articles*, "Journal of International Business Studies", fourth quarter, pp. 715–728.
- Coase, R.H. 1960, *The Problem of Social Costs*, "Journal of Law and Economics", No. 3, pp. 1–44.
- Dahrendorf, R. 1990, *Reflections on the Revolution in Europe*, Chatto & Windus, London.
- Dustmann, C., Frattini, T., Preston, I. 2007, Research conducted in *A Study of Migrant Workers and the National Minimum Wage and Enforcement Issues that Arise*, Report

commissioned by the Low Pay Commission, Department of Economics and Centre for Research and Analysis of Migration, (CReAM), University College London.

Feichtinger, C., Fink, G. 1998, *The collective culture shock in transition countries – theoretical and empirical implications*, “Leadership & Organization Development Journal Bradford”, Vol. 19, Iss. 6, pp. 302.

Global Corruption Report 2007, Transparency International, Cambridge University Press, Cambridge.

http://www.transparency.org/policy_research/surveys_indices/cpi/2007.

Guiso, L., Sapienza, P., Zingales, L. 2006, *Does culture affect economic outcomes?* NBER Working Paper (paper prepared for The Journal of Economic Perspectives), January.

Hardin, G. 1968, *The Tragedy of Commons*, “Science”, Vol. 162. No. 3859, pp. 1243–1248.

Hofstede, G. 1980, *Culture’s Consequences*, Sage Publications, Newbury Park.

Holmes, S., Susteian, C.R. 1999, *The Cost of Rights*, W.W. Norton, New York.

Kaczmarczyk, P. 2005, *Migracje zarobkowe Polaków w dobie przemian (Income seeking migrations of Poles at the time of transformation)*, Wydawnictwo Uniwersytetu Warszawskiego, Warszawa.

Kaufmann, D., Kraay, A., Mastruzzi, M. 2006, *Measuring Corruption: Myths and Realities*, September 2006 issue of World Bank Development Outreach.

Kępińska, E. 2003, December, *Recent Trends in the International Migration Poland 2003*, series: Prace migracyjne (CMR Working Papers: Migration Papers), No. 52, (SOPEMI/OECD report for Poland), Institute for Social Studies Warsaw University, pp. 1–76, Warsaw.

Kępińska, E. 2006, *Recent trends in International Migration. The SOPEMI Report for Poland, CMR Working Papers*, No. 15/(73), Warsaw: CMR.

Kolman, L., Noorderhaven, N.G., Hofstede, G., and Dienes, E., 2003, *Cross-cultural differences in Central Europe*, “Journal of Managerial Psychology”, No. 18(1), pp. 76–89.

Lambdsdorf, J.G. 2007, *Comments in: Transparency International Global Corruption Report 2007*, Transparency International, Cambridge University Press, Cambridge.

Landes, D. 1998, *The Wealth and Poverty of Nations*, Norton & Company Inc., New York.

Melnikas, B., Barsauskas, P., Kvainauskaite, V. 2006, *Transition processes and integral cultural space development in Central and Eastern Europe: main problems and priorities*, “Baltic Journal of Management”, Vol. 1, No. 2, pp. 201–212.

Lysgaard, S. 1955, *Adjustment in a foreign society: Norwegian Fulbright grantees visiting the United States*, “International Social Science Bulletin”, Vol. 7, pp. 45–51.

Meyer, K.E. 2000, April, *International Business Research on Transition Economies*, “CEES Working Paper”, No. 32.

Meyer, K.E. 2000, April, *Institutions, Transaction Costs, and Entry Mode Choice in Eastern Europe*, “CEES Working Paper”, No. 34.

Migration and Remittances: Eastern Europe and the Former Soviet Union, The World Bank Report, Europe and Central Asia Region, September 18, 2007.

Morawska, E. 2001, *Structuring Migration: The Case of Polish Income-Seeking Travelers to the West*, "Theory and Society", Vol. 30, No. 1. (February), pp. 47–80.

Murdoch, A. 2006, *Costs and Benefits of International Mobility*, "Contact International Business Voice", December 4, www.bpcc.org.pl/cultureshock.

Murdoch, A. 2007, June, *Some Costs of Culture Shock in the Process of Human Capital Adaptation during Temporary Migration at the AIB 2007 Annual Meeting*, Indianapolis, US, 25–28.

Murdoch, A. 2007, *Risks and Opportunities of International Labor Mobility in View of the Latest Migration Research Thought: a Review of Selected Modern Approaches*, post-doctoral research study (Warsaw School of Economics 03/E/0007/07) and a working paper.

Murdoch, A. 2008, *What features of the British culture are most attractive to the Polish migrants in the UK?* post-doctoral research study (Warsaw School of Economics 03/E/0024/08) and a working paper.

Nasierowski, W., Mikula, B. 1998, *Culture Dimensions of Polish Managers: Hofstede's Indices*, "Organization Studies", Vol. 19, No. 3, pp. 495–509.

Niessen, J., Huddleston, T., Citron L. 2007, *Migrant Integration Policy Index* British Council and Migration Policy Group, Brussels, September.

Oberg, K. 1960, *Cultural shock: adjustment to new cultural environments*, "Practical Anthropology", Vol. 7, pp. 177–82.

Pearce, J.L. 1995, (November), *A Reviewer's Introduction to Staging the New Romantic Hero in the Old Cynical Theatre: On Managers, Roles and Change in Poland*, "Journal of Organizational Behavior", Vol. 16, No. 6. , pp. 628–630.

Screpanti, E., Zamagni, S. 2005, *An Outline of the History of Economic Thought*, Oxford University Press, Oxford.

Sen, A. 1970, *Collective Choice and Social Welfare*, Holden Day, Inc., San Francisco.

Sztompka, P. 1993, *Civilizational Incompetence: The Trap of Post-Communist Societies*, "Zeitschrift für Soziologie" 22, No. 2, pp. 85–95.

Civilisational Competence: a Prerequisite of Post-Communist Transition (2000) (the text posted on the Internet by the Centre for European Studies for on-line use only) <http://www.ces.uj.edu.pl/sztompka/competence.htm>.

Sztompka, P. 1991, *The Intangibles and Imponderables of the Transition to Democracy*, "Studies in Comparative Communism", Vol. XXIV, No. 3, pp. 295–311.

Todeva, E. 1999, *Models for Comparative Analysis of Culture: The Case of Poland*, "International Journal of Human Resource Management", No. 10, pp. 606–623.

Trevor-Roper, H. 1989, *Europe's New Order*, "The Independent Magazine", 30 December, p. 14.

Wilk, R.R. 1996, *Economies & Cultures. Foundations of Economic Anthropology* Westview, Boulder, CL.

Zduńczyk, K., Blenkinsopp, J. 2007, *Do organisational factors support creativity and innovation in Polish firms?*, "European Journal of Innovation Management", Vol. 10, Iss. 1, pp. 25–40.

http://www.transparency.org/publications/publications/gcr_2007.

<http://news.bbc.co.uk/2/hi/europe/3513889.stm>.

[http://www.ey.com/global/assets.nsf/UK/ITEM_Club_Special_Report_-_Migration_and_the_UK_economy/\\$file/EY_ITEM_Migration_Report_Dec_2007.pdf](http://www.ey.com/global/assets.nsf/UK/ITEM_Club_Special_Report_-_Migration_and_the_UK_economy/$file/EY_ITEM_Migration_Report_Dec_2007.pdf).

[http://www.ey.com/global/assets.nsf/UK/ITEM_Club_Special_Report_-_Migration_and_the_UK_economy/\\$file/EY_ITEM_Migration_Report_Dec_2007.pdf](http://www.ey.com/global/assets.nsf/UK/ITEM_Club_Special_Report_-_Migration_and_the_UK_economy/$file/EY_ITEM_Migration_Report_Dec_2007.pdf).

http://news.bbc.co.uk/2/hi/uk_news/6957171.stm.

<http://www.geert-hofstede.com/>.

http://www.visasinfo.com/uk_worker_registration.html.

http://siteresources.worldbank.org/INTMOLDOVA/Resources/ECA_MigrationReport.ppt.