

Voda, Ana Iolanda; Tiganas, Claudiu; Filipeanu, Dumitru

**Article**

## Trust, Corruption, Bribes and Economic Development in Central and Eastern European Countries

CES Working Papers

**Provided in Cooperation with:**

Centre for European Studies, Alexandru Ioan Cuza University

*Suggested Citation:* Voda, Ana Iolanda; Tiganas, Claudiu; Filipeanu, Dumitru (2013) : Trust, Corruption, Bribes and Economic Development in Central and Eastern European Countries, CES Working Papers, ISSN 2067-7693, Alexandru Ioan Cuza University of Iasi, Centre for European Studies, Iasi, Vol. 5, Iss. 4, pp. 654-662

This Version is available at:

<https://hdl.handle.net/10419/198282>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# TRUST, CORRUPTION, BRIBES AND ECONOMIC DEVELOPMENT IN CENTRAL AND EASTERN EUROPEAN COUNTRIES

Ana Iolanda Voda\*  
Claudiu Tiganas†  
Dumitru Filipeanu‡

**Abstract:** *The evolution of the Western world has drawn on theoretical structures of classical and neoclassical liberalism for its explanatory support and sources of inspiration for centuries. Against this ideological background, institutionalists aim at showing that growth is a process of transformation, a double change: an economic and an institutional one. In this analysis, our purpose is to highlight the importance of informal institutional arrangements and their quality in explaining the disparities of revenues and developments between countries. In our approach, we will consider several indicators meant to highlight various aspects of research. The approach proposed is a transversal-comparative one and static methods pertain to uni- and multivariate analysis. The results obtained suggest the existence of major differences within the Central and East European area as far as informal institutions are concerned; moreover, the analysis conducted confirms the existence of a significant relation between the level of development and the structure of informal arrangements such as: trust level, bribe culture and corruption control.*

**Keywords:** institutions; trust, corruption; bribes, development

**JEL Classification:** K420; O170

## INTRODUCTION

Reform programmes in Central and Eastern Europe were mainly based on recommendations provided by international bodies consisting of: the adherence to monetary policies meant to reduce existing disequilibria, price liberalisation, economic openness to overseas, stimulation of private companies, set up and privatisation of state companies, the elimination of state control, reformation of the legislative system, rule of law, etc. All these transformations, adaptations and changes of the system deeply affected ideologies, values, human relationships, etc. Every country has created a certain institutional structure according to shared values, beliefs and ideologies at a given time.

---

\* Faculty of Economics and Business Administration, Alexandru Ioan Cuza University of Iasi, Romania, e-mail: yolandadr3i@yahoo.com.

† Faculty of Economics and Business Administration, Alexandru Ioan Cuza University of Iasi, Romania, e-mail: clau\_tiganas@yahoo.com.

‡ Department of Teacher Education and Training, Gheorghe Asachi Technical University of Iasi, Romania, e-mail: filipeanu@hotmail.com.

However, as some countries efficiently adjusted to new changes, others “statically *enclosed* themselves within the initial project or were politically imposed a dysfunctional and disarticulated system which did not fit their beliefs of development”. (Pohoata, 2009, p. 293) Consequently, post-communist changes affect more than the social organisation, ideologies, inter-human relations, values and ways of doing things in depth. Changes were inherent as a part of natural evolution even though they were not always a sign of social progress. “The path followed by post-communist societies is meant to redefine modernity locally, to complete the process of modernisation and relative globalisation by adopting tendencies from the Western world (either by imitation, contagion or planned changes). Transition is the stage of major changes, having a new societal order as macro social product”. (Voicu, 2005, p.23) Of all Central and Eastern European countries studied, Hungary and Poland experienced partial economic reforms during 1968-1989 in the sense of decentralisation of their economies (increase of enterprise autonomy, partial price liberalisation, etc.) (Ciobotaru, 2009, p.11) All these short-term measures did not improve considerably the performances of the two countries, shaped mentalities and economic behaviours of population, preparing them for a competitive economy. As a result, the process of transformation, creation and adaptation occurred in countries such as the Czech Republic, Hungary and Poland and it was a successful one based on healthy institutional arrangements. To Romania, the change of political regime, i.e. of the communist institutions of that time to democracy and freedom did not suffice. The lack of efficient institutions, a high level of corruption, low self-esteem are only a few of the specific traits of this country. Time is needed for these individual values to find their pace. In the period following the transition from an ordered economy to a market one, Romania went through a decade of instability and economic decline. Against the *legislative background*, transition was characterised by various tensions: on the one hand, owing to the need for existence of a powerful state, capable of dealing with new challenges and, on the other hand, the need to limit its power. The velocity in applying new regulations created an appropriate context for a less transparent affirmation of *interest groups*. The absence of institutions or their weak representation led to opportunist and corrupt behaviours. The business environment thus became one in which the alliance between the state as bureaucratic body and an exclusive category of *elites* governed.

It is widely acknowledged that formal institutions alone cannot influence human behaviour, yet its largest part can be explained by means of informal institutions rooted in the culture of a society and drawing on it. However, this aspect has been neglected so far. This is because informal

institutions cannot be identified, measured or quantified easily. Unofficial constraints have a much more complex character as they “necessarily contain features that render the exchange viable by reducing the costs incurred by measurement and constraint”. (North, 1990, p. 42) Consequently, formal institutions are the source for cutting costs; in other words, institutions not only influence the big picture, but also how it is divided into various groups and people in society which should base their relations on trust. Ergo, we strongly claim that the macroeconomic environment of a state is stimulated by the *degree of trust* between individuals and institutions. In this respect, Zak and Knack highlight the fact that trust in a country depends on five primary factors: per capita income, income distribution, government efficiency, social cohesion and education. In their model, trust is associated with aggregated time which agents did not spend to check others’ actions. Trust is a product of both formal institutions and social homogeneity along with informal sanctions on cheaters. Their analysis proves that trust and social and institutional factors affecting it have an influence on growth rates.

## 2. DATA AND METHODOLOGY

For this approach, we aimed at taking into account various indicators meant to emphasise various aspects of research. Our approach is a transversal-comparative one and static methods are specific to the uni- and multivariate analysis. *The geographical area of interest* involves all member states of *Central and Eastern Europe*. Economic evolution in the region was unequal, some countries being more successful than others. Thus, Romania, Bulgaria, Latvia, and Lithuania recorded a significant decline during the first years of transition. For the other states, recovery was much quicker. In order to explain the situation of Central and East European countries, we aim at confirming or infirming the following hypotheses:

$H_0$ : Hypothesis 1. Trust, corruption control and bribe culture do not influence a country’s level of development;

$H_1$ : Hypothesis 2. Trust, corruption control and bribe culture influence a country’s level of development.

These hypotheses will be tested by means of a multiple regression model, namely:  $Y = \alpha + \beta_1 X_1 + \dots + \beta_i X_i + \dots + \beta_n X_n + \xi$ , where Y is the dependent or explanatory variable, the level of per capita income in PPS;  $X_i$  are independent variables, where  $i = 1, n$ ;  $X_1$  - trust level;  $X_2$  - corruption control;  $X_3$  - bribe culture;  $\xi$  is a residual variable;  $\alpha, \beta_i$  are regression coefficients.

### 3. RESULTS

Table 1.1 shows the values of the correlation report (R) and determination report. As can be seen, the 0.829 value for R and 0.795 for  $R^2$  show us that there is a linear, direct relation between the dependant variable and the independent ones.

**Table 1.1 - Assessed values of the correlation report and determination report**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892 <sup>a</sup>	.795	.693	6.83274

a. Predictors: (Constant), *Trust*, *corruptioncontrol* and *bribe*

b. Dependent Variable: GDP per capita in PPS

**Tabelul 1.2 - ANOVA**

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1088.782	3	362.927	7.774	.017 <sup>a</sup>
	Residual	280.118	6	46.686		
	Total	1368.900	9			

a. Predictors: (Constant), *Trust*, *corruption control* and *bribe*

b. Dependent Variable: GDP per capita in PPS

To test the significance of the correlation report, we used two hypotheses:  $H_0 : \eta = 0$  – the value of the correlation report is null and  $H_1 : \eta \neq 0$  – the value of the correlation report is significantly different from zero, which shows that there is a statistical relation between variables. For the model above, the calculated value of the statistical test F is:

$$F_{\text{calc}} = \frac{S_E^2}{S_R^2} = \frac{362.927}{46.686} = 7.774$$

The calculated value of statistical F is higher than the theoretical value which proves that hypothesis  $H_0$  is rejected and  $H_1$  is accepted. We may guarantee that the value of the correlation report is significantly different from zero to an extent of 95% probability. Moreover, this also holds true for the probability value associated with test statistic when compared to the level of the significance threshold chosen ( $\alpha = 0.05$ ). Further to the mentions above, we can see that there is a

strong statistical relation between the level of development measured by per capita income in PPS, trust level, corruption control and bribe culture.

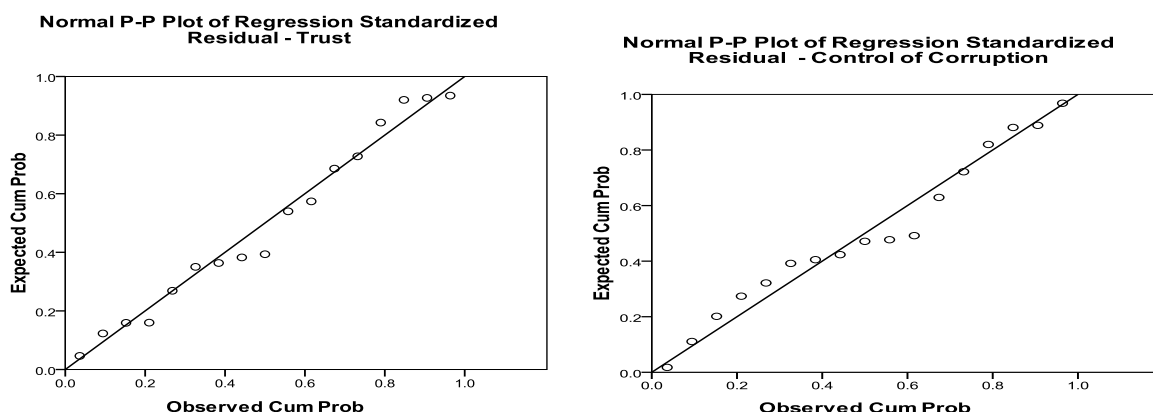
**Table 1.3 - Assessments of parameters in the multiple regression model**

<i>Model –Informal institutions/Level of development</i>	
Dependent Variable	GDP per capita in PPS
Method	OLS Regression
Trust	1.345
Control of corruption	0.252
Bribe	-0.617

In the model above, all assessed values of the R correlation report are 0.892 and R square 0.795 for the determination report, respectively. This points out that simultaneous variation of independent variables explains the variation of dependent variable to an extent of 79.5%. From the conducted analysis, we may notice that positive values of regression coefficients point out the positive influence of *trust level* and *corruption control* variables on the level of development.

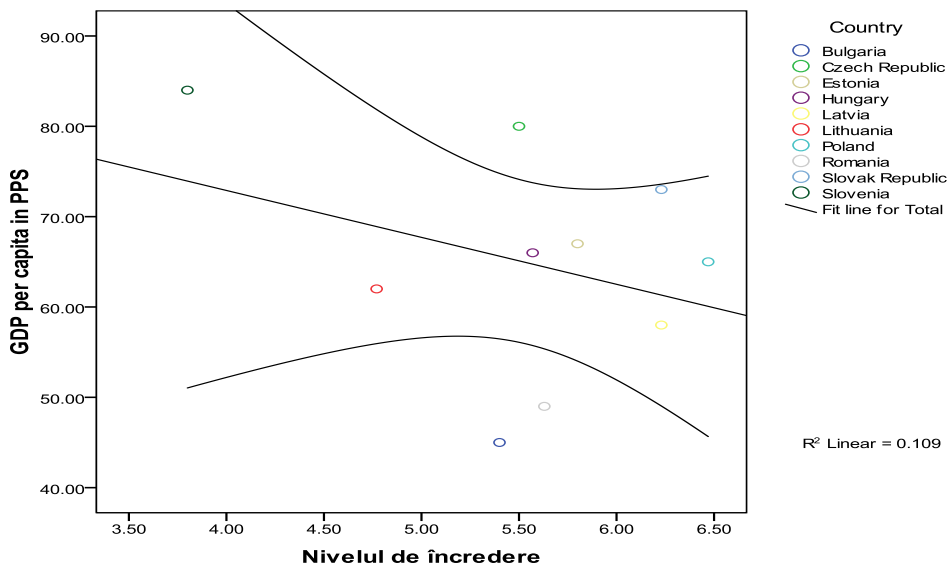
To check the work hypothesis, we can use the graph achieved by means of regression residuals diagram. (see Figure 1.1)

**Figure 1.1 - Regression residuals diagrams: trust level and corruption control**

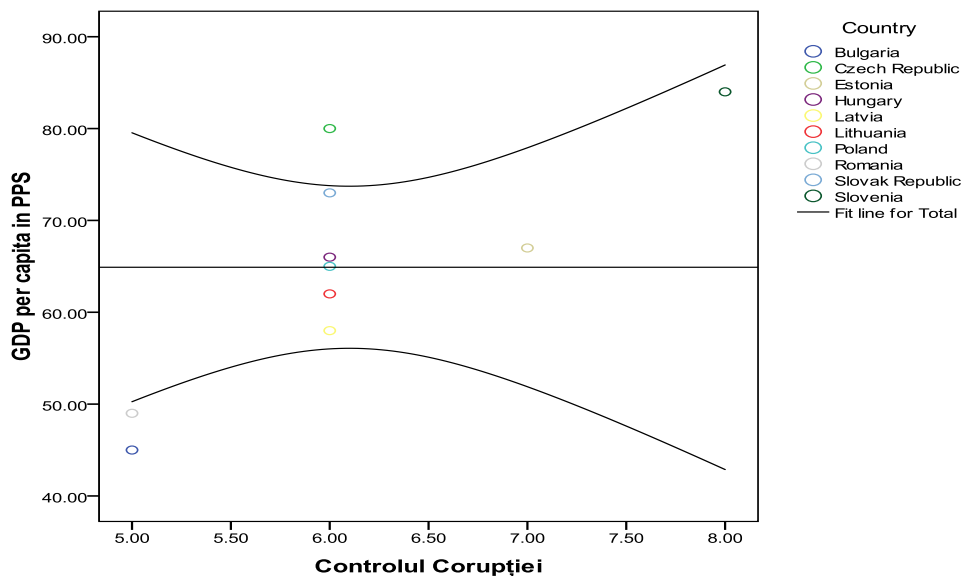


The diagrams above highlight the fact that error distribution abides by a normal law as the points represented by the values of errors are located near the straight line in the square line.

**Figure 1.2 - Trust level/ development level measured by GDP in PPS**



**Figure 1.3 - Corruption control/ development level measured by GDP in PPS**



Studies in the literature of the field prove us that formations built in the context of a high level of mutual trust reached higher levels of performance than conflictual societies. Robert Putnam (1993), in his *Making Democracy Work*, underlines the fact that economic performance is predicted by the

degree of spontaneous association between individuals. “Trust implies the existence of mutual relations of acceptance between individuals and institutions so as to prevent or solve conflicts and contribute to an easier interaction. In the absence of trust, contracts are harder to enforce, caution is required, as well as longer negotiation periods and serious causes for conflicts, not to mention that the risk factor often raises contract price over usual production costs.” (Popescu, Pohoata, 2007, p.201) Fukuyama (1995) seizes the importance of property rights, law and contract as fundamentals in the efficient operation of institutions, yet all these need to be accompanied by trust, mutual help and moral obligations. As the author underlines, “all procedures that substitute trust lead to higher transaction costs. Put differently, the fact that trust prevails in society means that an additional tax should be introduced for all types of economic activity, a tax which is absent in societies with a higher trust level”. (Fukuyama, 1995, p.148) Therefore, minimum impediments in exchange are an institutional feature that stimulates economic growth and development. Such an institutional arrangement allows us to follow a durable path that leads to economic performance.

#### 4. DISCUSSIONS AND CONCLUSIONS

The analysis conducted (see Figure I.2 and Figure I.3) shows that countries such as the Czech Republic, Estonia and Poland recorded the highest trust levels and corruption control. The trust of economic agents in informal institutions, legislative discipline, transparency of the decisional process are only some of the feature of the aforementioned countries. Romania still bears the marks of the past. The communist regime created structural stimulants to engage in large scale corrupt behaviours, deeply rooted in the culture of our country to this day. The great problem of our country pertains to the existence of a system that lacks transparency in decision making and in efficient instruments for monitoring, evaluating and controlling activities. As a result, countries with weak institutions are incapable to sanction spoiling behaviour accordingly and cannot prevent power abuses, bribery and costs incurred by actions with a higher corruption level.

The minus regression coefficient is *bribe culture* which points to us the negative relation between this indicator and the level of development. Industrial regulations, tax laws, supply problems, the introduction of new technologies or, in other words, the amount of opportunistic behaviour are determined by the nature of formal and informal institutions and how they are correlated. For instance, in countries with an unstable legislative system and where opportunistic behaviour is not sanctioned



accordingly, the institutional environment is dominated by bribery and corruption. Offering expensive gifts to Chinese officials during transactions is a rule hard to *digest* in most Western or developed countries where free competition requires an impartial behaviour from the part of officials. Employment practices within public organisations are another instance of the sort. Here, unwritten employment laws for personnel based on kinship and not professional proficiency is another way of *circumventing* formal rules created to ensure a competitive labour market in the public sector.

Considering the fact that Sig. value  $< 0.05$  for all the three variables analysed, we can conclude that, up to a probability of 95%, the level of development depends on informal institutions operating in a society.

## REFERENCES

- Ciobotaru, M. (2009) *Tarile Europei Centrale si de Est in contextul redefinirii relatiilor est-vest*, Bucharest: University Press.
- Economist Intelligence Unit, available at:  
<https://portal.eiu.com/login.aspx?service=https://www.eiu.com&brand=&clientid=d1t330t75m6v&gateway=true&returnto=https%3a%2f%2fwww.eiu.com%2findex.asp%3f%26rf%3d0>.
- International Monetary Fund, Reports and Statistics 1990-2013, available at:  
<http://www.imf.org/external/data.htm>.
- Fukuyama, F. (1995) *Social Capital and the Global Economy*. Foreign Affairs, Vol.74, no. 5. Heritage Foundation, 2000-2013, available at:  
<https://wefsurvey.org/index.php?sid=28226&lang=en&intro=0>.
- Human Development Indicators, rapoarte 1990-2013, available at: <http://hdr.undp.org/en/statistics/>.*
- North, D. (1990) *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North, D. (2003) *Institutii, Schimbare institutionala si performanta economica*, Chisinau: Stiinta.
- Pohoata, I. (2009) *Repere in economia institutionala*, Bucharest: Economic Press.
- Popescu, C., Pohoata, I. (coord) (2007) *Capital Uman, capital social si crestere economica*, Iasi: Alexandru Ioan Cuza University Press.

- Putnam, R. D. (1993) *Making Democracy Work. Civic traditions in modern Italy*, New York: Princeton University Press.
- Voicu, B., (2005) *Penuria Pseudo - Moderna a Postcomunismului Romanesc. Schimbarea sociala si actiunile indivizilor*, Iasi: Expert Projects.
- WEF's annual Executive Opinion Survey, available at <https://wefsurvey.org/index.php?sid=28226&lang=en&intro=0>
- World Bank, rapoarte si date statistice, 1990-2013, available at: <http://data.worldbank.org/>
- World Economic Forum - *The Global Competitiveness Report*, Klaus Schwab, Professor Klaus Schwab World Economic Forum Editor Professor Xavier Sala-i-Martin Columbia University Chief Advisor of The Global Benchmarking Network, 2000-2013, available at: <http://www.weforum.org/issues/global-competitiveness>
- World Values Survey, 1990-2008, available at <http://www.worldvaluessurvey.org/>
- Zak, Paul J., Knack, Stephen, Trust and Growth (2001) *Economic Journal*, Vol. 111, No. 470, available at SSRN <http://ssrn.com/abstract=304639>