A PRACTICAL APPROACH OF THE CORRUPTION PARTICULARITIES IN PUBLIC SECTOR

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Abstract:
Our article studies the particularities of the phenomenon of corruption in the local public administration. Starting from the main objective, we aim to highlight whether there is a positive relation between how the current level of corruption in the local public administration system is assessed and the elements identified at the hypothesis stage as potential causes that can limit anti-corruption efforts.
Our scientific research will contribute to the enrichment of the specialized literature with a new case study and will represent know-how for the leaders of the public organizations.
The obtained results can be implemented within the public sector for the optimization of internal processes and as a theoretical reference in the anticorruption training activity. This approach is a topic of high interest due to the message sent to the organization's staff as a sum of individuals and it's influence on the behavioral side in the avalanche of new risks and vulenrability.

Keywords: corruption, public administration, civil servant, causes of corruption

1. Introduction

In literature, the topic of preventing and combating corruption reflects the monitoring of issues related to the relevant legislative framework, the identification of the causes that generate corrupt behavior, the environment that leads to acts of corruption, as well as the determination of the ways in which the corrupt activities materialize.

Considered as having a perpetual existence, the way in which corruption materializes is generally determined by the specificity of the society in ways of existing socio-economic-political conditions at the time of the analysis. This is the reason why, by analyzing the causes that generate corruption (with variables of time, space and specificity of the investigated entity), we will identify fundamental differences.

Another factor that leads to the diversity of these causes is the perspective from which the analysis is carried out, with multiple approaches from criminological, legal, social, economic or historical point of view. We assume that an objective and comprehensive analysis of the causes of the corruption phenomenon should be carried out at an interdisciplinary level.

2. Literature Review

Without presenting exhaustively the causes identified in the literature, we report the findings of some specialists who have radiographed this field, with pre-emptive results for the present scientific research.

Becker (1968) supports the theory that the most important factors influencing a person to commit an act of corruption are the probability that the act will be discovered and the magnitude of the punishment for this act.

The factors that determine the phenomenon of corruption have been a subject that has also attracted the attention of Lisciandra, who found in the literature six causes of corruption: the high level of regulation and the low level of competition, the high level of public spending, the increase of the international trade, the low salaries of public servants, the discouragement of investments as well as future causes (2014, pp. 188-189).

Kaufmann and Dininio (2006) consider poverty as the main cause of corruption. According to them, the corrupted behaviors are the source of incentives and deficient systems.

Burlea-Șchiopoiu and Popa present the lack of legitimacy as a potential generator factor of corrupt behavior.

Ionescu and his collaborators (2012) identify the incorrect legal system as an important determinant of corruption.

In attempt to provide an integrated and unified perspective of corruption, Diamant (2013) carries out a broad analysis of the literature.

The author undertakes a broad assessment of different approaches and definitions formulated over time. He cites fundamental works in the field of corruption and structures the main causes of corruption in economic, legal and social fields.

Burlea-Şchiopoiu and Remme (2017) found that there is a link between dispersing responsibilities within an organization and the risk of unethical behavior. Also, Burlea-Șchipoiu and Idowu (2016) claim that the dispersal of ethical responsibilities is generated by a misunderstanding of autonomy and self-government and is a motivation for managers to promote beliefs and non-virtuous values.

Another interesting approach that contributes to understanding the multiple causes of corruption is presented by Laver (2014) which presents three different levels or *worlds* of influences and stimuli. These interact and form the corrupt action: the intrinsic desire (the inner world), the sociological conditions (the meso world) and the external opportunities (the outer world).

The internal world includes microeconomic and psychological determinants, *the "mezo world"* refers to sociological factors, including informal norms or institutions and values (norms or social norms), and the *outside world* refer mainly to formal institutions, history and geography.

Braşoveanu (2010) presents two major factors as the main causes of the emergence and development of corruption in Romania: the motivational factors and the existence of the opportunity. Regarding the motivational factors of corruption, he emphasizes that committing an act of corruption implies a reason and purpose (obtaining a personal benefit). According to the author, the decision of officials to go into the criminal offense and become corrupt is based, first of all, on the motivation of a financial gain. The author identifies the following motivational

factors, as main determinants of corrupt behaviors: ethical and moral standards, probabilities of beeing discovered, low penalties, rewarding officials, pressure from fraudsters.

Duţulescu and Nişulescu-Ashrafzadeh (2016) conducted a scientific research on the causes and mechanisms responsible for the high level of corruption in Romania. In their study they used as variables the "number of final convictions for corruption acts in 2010-2014", per capita GDP, the level of education - expressed as the minimum of the total population of each county a high school education, the percentage of employees of the public sector related to the total number of jobs in the county, the average duration of a corruption process and the average term of punishment for corruption. Analyzing corruption from an individual the point of view, it is possible to establish with greater accuracy the determining elements of the negative phenomenon. The analysis revealed that the average duration of a criminal trial for a corruption offense (40.11 months) is higher than the average duration of the sentence (32.92 months).

According to the correlation matrix built by the authors, they concluded that GDP per capita has the greatest impact on corruption, followed by the level of education and the average duration of the criminal process. Thus, Duţulescu and Nişulescu-Ashrafzadeh concluded that people are encouraged to commit corruption acts when they have a lower standard of living. The authors of corruption acts are unaware of the negative effects of corruption and they are encouraged to manifest corrupt behavior by the weak judicial system. By committing an act of corruption, people are exposed to increased risks and prevent society from having a fruitful development.

After analyzing the specific aspects of combating corruption in public administration, Păceşilă (2004) concludes that it has an extended character at central and local level and is determined by excessive bureaucracy, overlapping for tasks and responsibilities at different positions, interference between administrative and political ones, opacity in decision-making, and inappropriate legal framework for correcting dysfunctions in the public administration system. The lack of procedures and methods in the detection of corrupt acts and the lack of information as well as the institutional dissolution of authority are the causes that allow the corruption phenomenon under new valences.

3. Research objectives

Our research will be pointed to identifying the causes of corruption offenses - in the public sector, perceived as a fundamental pillar of corruption prevention management.

3.1 Methodology of research

The respondents within a structure belonging to the local public administration were invited to answer a questionnaire on the causes of corruption.

The sample was made of 250 civil servants and contract staff of departments, departments and functional departments that manage public affairs in an integrated approach with other state institutions acting in economic and social areas with a strong representation status. After answering the questionnaire, 190 civil servants and contract staff provided valid answers, thus obtaining a positive feedback from 76 % of interviewees.

The structure of respondents by age was as following: 8.9 % of respondents were aged between 20 and 30 years, 27.4 % between 30 and 40 years, 38.4 % between 40 and 50 years and 25.3 % were over 50 years old. By gender, the structure of the respondents was as following: 32.0 % men and 68.0 % women.

52.63 % of the respondents who provided validated data have advanced training (postgraduate, masters, doctorate) in the field of activity, 43.68 % have higher education (college, university) while 3.68 % have medium training (high school, vocational school, vocational school, vocational training),

Thus, it is noticed that about 60 % of respondents work in an institution for over 10 years.

Depending on the work period in the institution, 9.5 % of the respondents were under 1 year, 12.1 % were between 1 and 3 years, 43.16 % were between 10 and 20 years and the remaining 17.89 % were over 20 years.

From the total number of the respondents, 90 % have an execution function while the remaining 10 % are management staff. This percentage is in accordance with the regulations in the field which stipulate that the total number of management positions within each public authority or institution, which has its own / specialist and contract staff or, as the case may be, only contract staff, is maximum 12 % of the total number of approved posts.

3.2 Research question

In order to evaluate the causes that generate the corruption phenomenon we have developed the following hypotheses:

The main hypothesis is that there is a positive relation between how the current level of corruption in the local public administration system is assessed and the elements identified at the hypothesis stage as potential causes that can limit anti-corruption efforts.

The hypothesis developed for the examination of the proposed objective are the following:

Hypothesis 1: The existence of a parallel work agenda is an important cause of corruption.

Hypothesis 2: Educational and cultural factors specific to the local socio-economic environment are an important cause of corruption.

Hypothesis 3: Poor staff training and poor recruitment and promotion system are a major cause of corruption.

Hypothesis 4: Lack of effective and strict control over employee activity is a major cause of corruption.

Hypothesis 5: Personal relationships between citizens and employees are an important cause of corruption.

Hypothesis 6: Perpetuating an organizational culture that is not related to the professional ethics is an important cause of corruption.

Hypothesis 7: The specificity and complexity of finding and instrumenting corruption is an important cause of corruption.

Hypothesis 8: The low level of salary and working conditions are an important cause of corruption.

Hypothesis 9: The incoherent legislative framework which is inadequately correlated with effective managerial measures is an important cause of corruption.

Hypothesis 10: The lack of transparency and communication in the public sector is an important cause of corruption.

Hypothesis 11: The existence of a degree of politicization of the administration is an important cause of corruption.

Hypothesis 12: Discrepancies in the personality and training of employees are an important cause of corruption.

Hypothesis 13: The passive attitude of citizens towards the public administration is an important cause of corruption.

Hypothesis 14: Excessive bureaucracy is an important cause of corruption.

Hypothesis 15: The existence of monopoly in the provision of services is an important cause of corruption.

In order to validate the hypotheses of the research and to identify the influence of each possible cause on the corruption phenomenon, we have operationally defined the following variables: parallel work agenda (V1), educational and cultural factors (V2), poor vocational training / poor recruitment and promotion system (V3), lack of control of the employees' activity (V4), personal relations (V5), non-compliant organizational culture (V6), the determination and instrumentation of corruption (V7), low salary / working conditions (V8), incoherent / uncorrected legislative framework with efficient managerial measures -V9, lack of transparency and communication (V10), the degree of politicization of public administration (V11), deficiencies in staffing / training (V12), passive attitude of citizens (V13), excessive bureaucracy and monopoly (V14), the current level of corruption phenomenon (V15).

4. Results and discussion

An important analysis for the regression model is **testing the multi-collinearity of the variables included in the regression model** (Garson, 2016, p. 76). Multi-collinearity is represented by the situation where two, three or more independent variables included in the regression model in order to explain the variation in perception of the emergence of concrete corruption risk have a high degree of influence or association. If the level of correlation between the dependent variable and the independent variables is strong, it can be observed that the standard errors of the regression coefficients also have high values and the effect of this result is that it becomes difficult to estimate the relative contribution in explanation of variance. In other words, it is not possible to identify correctly, validly and with a high level of confidence the importance that each predictor variable has in explaining the dependent variable.

The reasons why multi-collinearity is a major problem in multiple regression (Pituch and Stevens, 2016, p. 76) are:

- significantly affects the magnitude of the multiple correlation coefficient (R), since the independent variables explain to a large extent the same variant of the dependent variable;
- makes the importance of a predictor included in the analysis difficult to be determined (because the effects of predictors are confused due to the associations between them);
- amplifies the variations in regression coefficients and the larger these variations, the more the regression equation becomes unstable and the predictive value of the model decreases.

The multi-collinearity testing of the variables included in the regression model indicates that the two indicators considered in the statistical analysis (tolerance factor or VIF variance factor) meet the minimum thresholds:

- **The tolerance factor:** the value of the indicator, which tends to 1, suggests that there is no multi-collinearity relation between the independent variables (the smallest value for this indicator is 0.510 for the variable V3 - Poor vocational training / recruitment and promotion);
- **The VIF variance factor:** the VIF score between 1 and 10 suggests that the regression model is not strongly influenced by the multi-collinearity of the independent variables (VIF with the highest value is 1.962, for the attribute V3 - Poor vocational training / Incorrect recruitment and promotion system, while VIF with the lowest value is 1,150, recorded for attribute V7 - Finding and investigating corruption acts).

Table 1

Summary of the regression model

Model	R	R^2	Ajusted R^2	Standard error of the estimate	Durbin-Watson Test
1	0.554[a]	0.307	0.175	0.967	2.002

[a]Predictors: V1 – V15.
[b]Dependent Variabile: V16.

The determination coefficient **R^2** has the value of 0.307, which means that the level of the variation explained is about 31 %, indicating a moderate influence.

Based on the literature, the value of the R^2 determination coefficient is valid for a deeply exploratory scientific approach and allows further analysis

R2 adjusted is the adjusted determination coefficient (Field, 2009, p. 221), being a modified measure of the determination coefficient; this indicator is useful in analyzing and interpreting the validity of the multiple regression model in the smallest squares method since, unlike the determination coefficient (R2), it takes in consideration the size of the sample and the number of independent variables included in the model to explain the variance of the dependent variable.

The value of the **Durbin-Watson test** is 2.002, so the hypothesis of the lack of self-correlation between the residual values obtained by running the multiple regression model is confirmed.

The **Durbin-Watson test** considers the hypothesis that the observations (obtained values from the questionnaire) are independent; the test verifies the serial correlations between the errors and determines if there is a correlation between the residual values resulting from the application of the multiple regression model.

The resulting residual values should not be correlated (or independent). This situation is described as a lack of autocorrelation. The value of the test may vary between 0 and 4, with an average value of 2 meaning that the residue is uncorrelated. A value greater than 2 indicates a negative correlation between adjacent residues, while a value below 2 indicates a positive correlation. For an adequate interpretation, Field (2009, pp. 220-221) suggests that values of less than 1 or greater than 3 are cause for concern; however, values closer to 2 may still be problematic, depending on the sample and regression model built.

We will formulate a null hypothesis (H0) according to which there is no direct relation between the explanatory variables of the regression model and the dependent variable (the perception of the occurrence of the concrete corruption risk). Thus, the null assumption is made, which assumes that none of the dependent variables included in the analysis explain the variation in the perceived risk of corruption in public institutions caused by interested persons. The null hypothesis, respectively the alternative hypothesis (that there is a direct linear link).

Table 2

The analysis of Variance – ANOVA

Model		Sum of Squares	df	Mean Square	F	(Sig)
1	Regression	32.711	15	2.181	2.331	0.008[b]
	Residual	73.921	79	0.4936		
	Total	106.632	94			

[a] Dependent variable: V16.
[b] Predictors: V1 – V15.

The table above presents a series of information that is useful in testing the statistical significance of the independent variables included in the analysis. Thus, the null hypothesis (H0) is formulated: there is no direct relation between the explanatory variables of the regression model and the dependent variance (the perception of the occurrence of the concrete corruption risk). Thus, the null hypothesis is made, which assumes that none of the dependent variables included in the analysis explain the variation in the perceived risk of corruption in public institutions caused by interested persons.

The value of the F test is 2.331. For a confidence level set at 95 % for statistical significance testing, the value of the F test is interpreted as a valid one, since the resulting reference threshold is less than 0.05 (Sig. = 0.008). Thus, the null hypothesis is rejected and it can be asserted with a confidence level of 95 % that at least one of the regression coefficients is different from the value 0 and, consequently, the alternative assumption of regression model validity is accepted (Field, 2009, p. 207).

Table 3

Coefficients of the regression model

Model	Unstandardized coefficients		Standardized coefficients	t	Significance threshold (Sig)	Collinear	
	Beta (β)	Standard error	Beta (β)			Tolerance	VIF
Code | (Constant)	3.781	0.226		16.708	0.000		
V1	-0.135	0.274	-0.054	- 0.491	0.624	0.714	1.400
V2	0.209	0.233	0.098	0.896	0.373	0.728	1.374
V3	-0.224	0.278	-0.106	- 0.806	0.423	0.510	1.962
V4	-0.684	0.295	-0.253	- 2.320	0.023	0.737	1.357
V5	-0.443	0.281	-0.167	- 1.576	0.119	0.778	1.286
V6	-0.493	0.249	-0.214	- 1.980	0.051	0.750	1.334
V7	-0.072	0.310	-0.024	- 0.234	0.816	0.870	1.150
V8	-0.138	0.221	-0.065	- 0.627	0.532	0.815	1.226
V9	-0.283	0.231	-0.133	- 1.226	0.224	0.743	1.346
V10	-0.039	0.327	-0.014	- 0.121	0.904	0.659	1.516
V11	0.007	0.267	0.003	0.027	0.978	0.561	1.783
V12	0.108	0.273	0.044	0.395	0.694	0.699	1.431
V13	-0.206	0.373	-0.062	- 0.550	0.584	0.690	1.449
V14	-0.015	0.231	-0.007	- 0.064	0.949	0.816	1.225
V15	-0.020	0.362	-0.007	- 0.056	0.955	0.536	1.866

[a] Dependent variabile: V16.
[b] Predictors: V1 – V15.

A careful analysis of the table above highlights the fact that not all the elements defined in the hypothesis stage as possible generating causes of the corruption phenomenon within the Romanian public institutions, have a significant relative contribution

The only two causes identified as having a statistically significant impact on the dependent variable are the non-compliant organizational culture (V6), and the lack of control of the employees' activity (V4).

Further, the regression model validation test was performed with residual values analysis.The role of performing a residual values analysis for this article is to supplement the above mentioned verification elements, the determination coefficient R^2 , the adjusted determination coefficient R^2 , and the Durbin-Watson Test.

The residual value analysis was carried out in two steps and consists of visual inspection of the standardized values respectively in the verification of the residual value histogram.

The first aspect considered is the interpretation of their values in comparison with the values of the dependent variable calculated by the regression model. It is intended that the residual values have a constant variance, regardless of the value of the dependent variable. In the literature, this hypothesis is called homosceasticity testing (a constant dispersion, independent of other variables) and is verified by plotting a bi-dimensional graph in which a dimension is represented by the standardized values of the dependent variable obtained by running the model regression, while the second dimension is the standardized residue values.

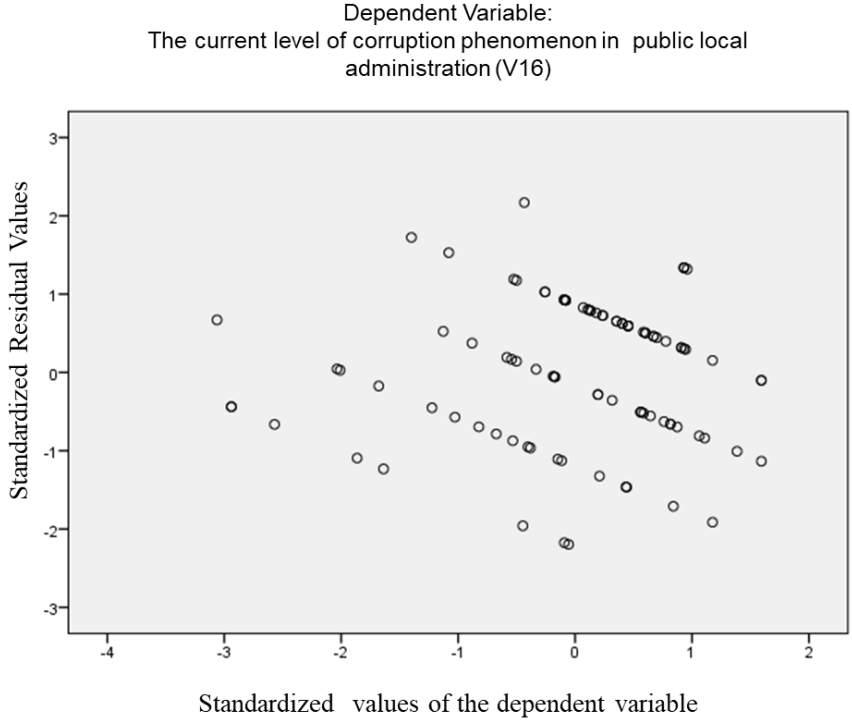

Figure 1. Analysis of residual values (homosceasticity test)

The analysis of the residue values, made using the graph shown in the figure above, indicates a random and relatively uniform dispersion distributed around 0. This result confirms the validity of the regression model and represents a validation of the hypothesis of homoscedasticity.

The second aspect is to test the normality of residues using the histogram and the probability of normality chart.

In order to be able to confirm the validity of the regression model, the residual value histogram must show a normal distribution. Any deviation from this curve is a sign of non-normality. From a graphical point of view, it must be represented in the form of a bell. The larger the deviation, the more the distribution is not normal.

The probability of normality graph also indicates residual values deviations in terms of assuming a normal distribution of these, a key hypothesis in validating the built-in regression model. The straight line in the probability graph represent a normal distribution, and the points represent the observed residue. Thus, in a perfectly distributed data set, all points will align exactly on the line and there will be no major deviations (significant deviations) from this line, which in fact indicates a major deviation from a normal distribution.

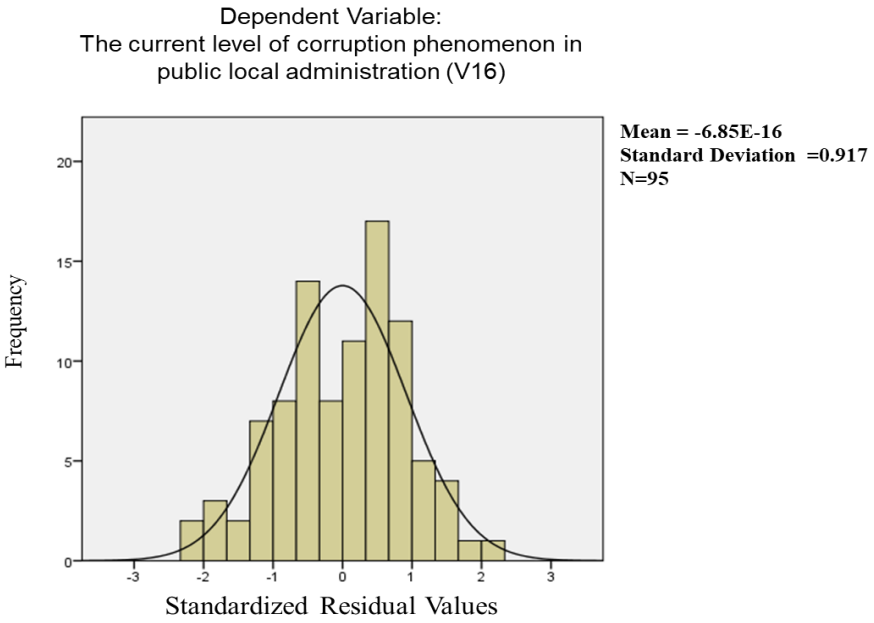

Figure 2. Histrogram of residual values (normality test)

Histogram of residual values: from the figure above, an approximately normal distribution can be observed, which confirms the hypothesis of normal distribution of residues.

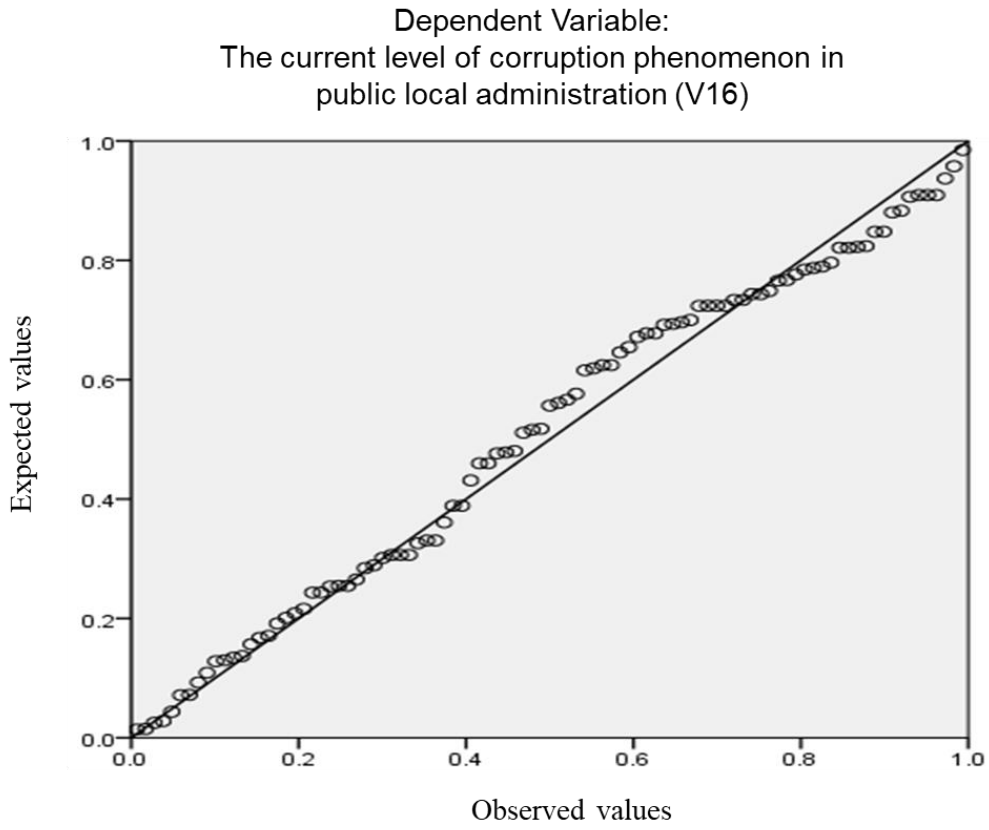

Figure 3. P-P residual values normality (normality test)

The graph of normal distribution of residual values: from the figure above, it can be observed that the graph points deviate only slightly from the normality line, which determines the assumption of normality of residual distribution and, implicitly, the validity of the built-up regression model.

After completing the stages designed to test the regression model, it can be concluded that the indicators analyzed meet the conditions to be able to confirm its validity.

Graphically, the conclusions obtained from the regression analysis can be summarized in the map below.

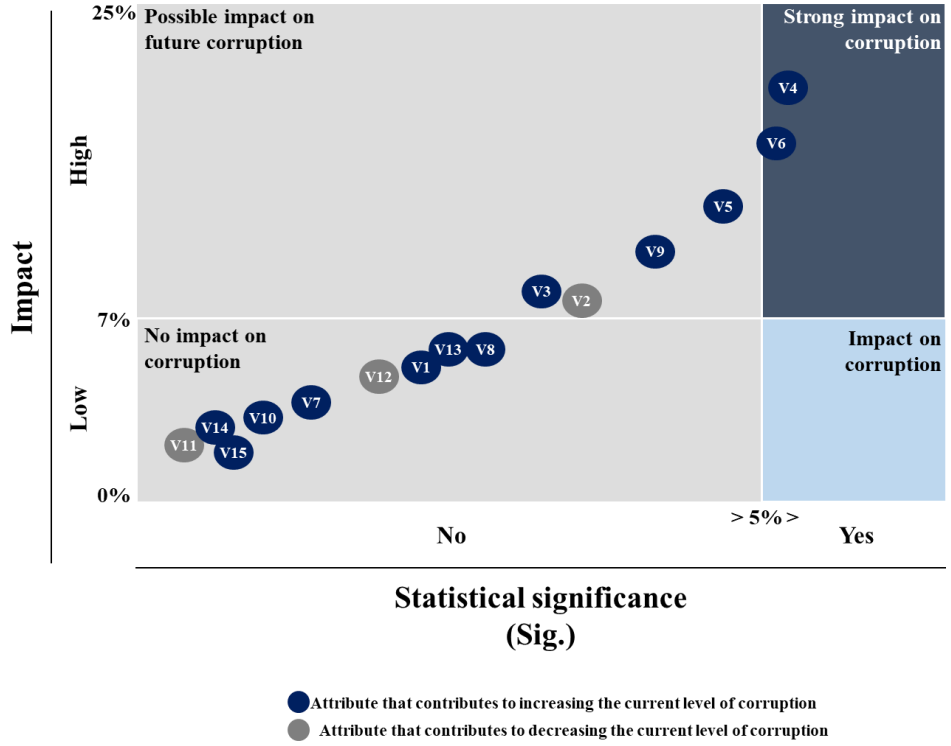

Figure 4. Analysis of the elements that are causes of corruption

The underlying criteria of the classification of attributes by influencing, regardless of the sense (positive or negative), the way in which the current level of corruption is assessed, the relative contribution and the level of statistical significance obtained.

- **lack of control of the employees' activity (V4)- (20 %, sig = 0.023);**
- **non-compliant organizational culture (V6)- (17 %, sig = 0.051).**

5. Conclusions

Regarding the causes of the phenomenon of corruption, our analysis shows that they have multiple valences.

In local public administration, the phenomenon of corruption is present at different levels and in different forms. Therefore, the study of the phenomenon of corruption in the local administration presents a number of particuliarities from the manifestations of the same concept in the private sector, because if in the public sector corruption affects the general interest and has negative effects on the local community, in the private sector, corruption has negative effects on the company's performance and profit.

The scientific research has observed and estimated the dysfunctional aspects in the decision-making and execution processes as well as the disturbing factors through their high risk of acts of corruption.

The illicit component of corruption and the fact that it often remains undiscovered has determined the limited nature of the data that can be obtained in this area, both quantitatively and qualitatively. This is also reflected in the number of people answering our questionnaire that was applied to a representative sample of 250 employees in a public organization and we received useful answers from 190 people, which means a response rate of 76 %.

Two hypotheses are validated (**Hypothesis 4:** lack of effective and strict control over employee activity is a major cause of corruption and **Hypothesis 6:** perpetuating an organizational culture that is not in line with professional ethics is a major cause of corruption);

Four hypotheses are partially validated (Hypothesis 5: Personal relationships between citizens and employees of the public entity are a major cause of corruption; **Hypothesis 9:** the incoherent legislative framework and inadequately correlated with effective managerial measures is an important cause of corruption; **Hypothesis 2:** Educational and cultural factors specific to the local socio-economic environment are an important cause of corruption; **Hypothesis 3:** Poor training of employees and the flawed system of recruitment and promotion is an important cause of corruption;)

Although the variables V5, V9, V2 and V3 do not have a significantly statistically contributeion in present, we observe their impact on the dependent variable. That is why we believe that these elements should be carefully monitored because they are possible future causes of corruption.

Nine **hypotheses are not validated: Hypothesis 1:** The existence of a parallel work agenda is an important cause of corruption; **Hypothesis 7:** The specificity and complexity of the detection and instrumentation of corruption acts is an important cause of corruption; **Hypothesis 8:** Low salary and specific working conditions are a major cause of corruption; **Hypothesis 10:** The lack of transparency and communication in the public sector is an important cause of corruption; **Hypothesis 11:** The existence of a certain degree of politicization in public administration is a a major cause of corruption; **Hypothesis 12:** Shortcomings in employee personality and training are an important cause of corruption; **Hypothesis 13:** The passive attitude of citizens towards the public administration is an important cause of Corruption; **Hypothesis 14:** Excessive bureaucracy is an important cause of corruption; **Hypothesis 15:** the existence of a monopoly in the provision of services is an important cause of corruption).

REFERENCES

Becker, Gary (1968), *Crime and Punishment: An Economic Approach*, Journal of Political Economy 76, 2, pp. 169-217.

Braşoveanu, Iulian Viorel (2010), *The Underground Economy and Corruption: Major Problems of the Romanian Economy*, Theoretical and Applied Economics, XVII, 11 (552), pp. 68-80.

Burlea-Șchiopoiu, Adriana and Idowu, Samuel (2016), *The independence of the managers: an ethical dilemma*, International Journal of Social Entrepreneurship and Innovation, 4(2), pp. 152-171

Burlea-Șchipoiu, Adriana and Remme, Joop (2017), *The Dangers of Dispersal of Responsibilities*, Amfiteatru Economic, 19(45), pp. 464-476.

Burlea-Șchipoiu, Adriana and Popa, Ion (2013), *Legitimacy Theory in Encyclopedia of Corporate Social Responsability*, Editors Samuel O. Idowu, Nicholas Capaldi, Liangrong Zu, Ananda das Gupta, Springer-Verlag Berlin Heidelberg, pp.1579-1584. DOI: 10.1007/978-3-642-28036-8_471

Chin, Wynne and Newsted, Peter (1999), *Structural equation modeling analysis with small samples using partial least squares* in R. H. Hoyle (Ed.), Statistical strategies for small sample research 307-341. Thousand Oaks: CA: Sage Publications.

Diamant, Eugen (2013), *The Nature of Corruption: An Interdisciplinary Perspective*, Discussion Paper No. 2013-59, available at http://www.economics-ejournal.org/economics/discussionpapers/2013-59/file, last visited 15.07.2018.

Duţulescu Silviu and Nişulescu-Ashrafzadeh Ileana (2016), *The main causes of corruption in Romania*, Financiar Audit, XIV, 8 (140), pp. 918-926.

Field, Andy (2009), *Discovering Statistics Using SPSS. 3rd Edition*, Sage Publications Ltd., London.

Henseler, Jörg, Ringle, Christian, Sinkovics, Rudolf (2009), *The use of partial least squares path modeling in international marketing* in Rudolf R. Sinkovics, Pervez N. Ghauri (ed.) New Challenges to International Marketing (Advances in International Marketing, Volume 20) Emerald Group Publishing Limited, pp. 277-319.

Ionescu, Luminiţa, Lăzăroiu, George, Joseph. Gheorghe (2012), *Corruption and Bureaucracy in Public Services*, Economic Amphitheater, XIV, 6, pp. 466-479.

Kaufmann D and Dininio P (2006), *Corruption: a key challenge for development* in in Stapenhurst, Rick., Johnston, Nyall. and Pelizzo, Riccardo. (eds) The Role of Parliament in Curbing Corruption, Washington, DC: World Bank, pp. 13-25.

Laver, Roberto (2014), *Systemic Corruption: Considering Culture in Second - Generation reforms*, Edmond J. Safra Working Papers, No. 45.

Lisciandra, Maurizio (2014), *A Review of the Causes and Effects of Corruption in the Economic Analysis* 187-195 in Organized Crime, Corruption, and Crime Prevention, S. Caneppele, F. Calderoni (eds.), Springer International Publishing Switzerland. DOI: 10.1007/978-3-319-01839-322

Matei, Adrian-Ducu (2013*) Corruption in Transition Economies*, Expert Publishing House Păceşilă, Mihaela (2004). *Aspects regarding the fight against corruption in the public administration*. Public administration and Management, 2, pp. 114-117

Pituch Keenan, Stevens James., (2016*)., Applied Multivariate Statistics for the Social Sciences Analyses with SAS and IBM's SPSS*, Sixth Edition, Editura Buch.