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CHARACTERISTICS OF THE REFORMING PROCESS IN THE ROMANIAN PUBLIC ADMINISTRATION SYSTEM

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Abstract

This paper aims to analyze, starting from the case of Romania, the degree to which public administration reform contributes to the reduction of corruption. In this paper, which has its own methodology, the level of corruption is estimated and a series of factors that can contribute to its reduction in a certain time interval are determined.

The analysis of the public administration reform process was realized by using a representative survey conducted in May 2007 at the public administration level. A two-phase sampling technique was used to build the sample, which included 971 civil servants from central and local public administration.

The reforming process of the central and local public administration Romania is analyzed with regard to the civil service reform, the decentralization process and fight against corruption in the public administration. Eight statistical variables were defined in order to analyze these aspects. Most of the variables used in this study reveal significant differences at the level of the four types of public administration institutions. Nevertheless, the analysis shows that the intensification of the reform process at civil service level leads to the reduction of the level of corruption.

1. Introduction

The Romania's accession to the European Union required a significant reforming process of the public administration system. In order to sustain the reform process a Strategy for the Reform in Public Administration was adopted in 2004. According to this strategy, the reform of public administration is seen as a process of transformation of central and local administration to address the needs of beneficiaries and of the accession to the European Union. Three main components were identified from this perspective:

- Civil service reform, which aims to improve the management of civil service and to develop the life long learning of civil servants;
- The reform of local public administration through the decentralization process;
- The improvement of public policy formulation process.

The reform strategy implies a set of reform measures that are taken at the civil service level, of local public administration, by continuing the decentralization process, and in the field of public policy formulation. According to the Strategy for the reform of public administration, the decentralization process is a key factor in the fight against corruption.

The reform strategy was implemented during 2004-2006 and financial resources from state budget, as well as from external sources (mainly European funds from the multi-annual Phare Program for 2004-2006 period or from the World's Bank PAL Program) were allocated to sustain the reform actions.

The financial resources were split along three priority axes, as follows:

- For the civil service - 7.2 million Euros. An additional annual amount of 13.94 million Euros has to be added to this amount. These additional funds are allocated during three years for personnel training as follows: 100 high civil servants through one-year specialized training programs; 150 young professionals through one or two-year specialized training programs; 3000 top management current civil servants, through one-year specialized training programs and 9000 middle management current civil servants through three-month specialized training programs.
- For supporting the reforming process of the local public administration - 8.15 million Euros through projects financed through the Phare program or through the World Bank's PAL program.
- For the third component of the reforming process - 8.15 million Euros were planned.

The financial support granted by the European Union to public administration since 1992 until the beginning of the multi-annual Phare program 2004-2006 amounts to 42 million Euros. The total value of the projects included in the multi-annual Phare program for supporting the implementation of the Strategy is 35.8 million Euros.

2. Statistical Data Sources

The analysis of public administration reforming process is realized through a sample survey conducted at the public administration level in May 2007. A representative sample at the level of civil servants was chosen for the survey. A two-phase sampling technique was used to build the sample, and it included 971 civil

servants from central and local public administration level. The error in estimating the parameters at the level of the reference population is 1.2%, and the probability of guaranteeing results is 97%.

A questionnaire was applied to the sampled subjects. The questions were grouped on the following topics:

- the internal organization of the public administration institutions;
- the pressure put on central and local public institutions by the political system;
- the decentralization process of public administration;
- the civil service;
- gender discrimination at the level of the public institutions;
- corruption and its implications for socio-economic development at national and local level.

Demographic and personal questions were included in the questionnaire as well, such as the person's gender, age, training level and the type of institution in which the respondent carries out his/her activities. The questionnaire was applied at the level of central public administration, local councils, prefect's offices and decentralized public services.

3. The characteristics of the reforming process

The reforming process of the Romanian central and local public administration is analyzed by referring to several aspects of the civil service reform, the decentralization process and corruption in the public administration. The main aspects describing the functioning of the public institutions are the knowledge of the purposes, objectives and development strategy of the organization (X_1), the budgetary performances of the public administration institutions (X_2), and the quality of the relationships between institutions and beneficiaries (X_3).

3.1. Knowledge of the organizations' purposes, objectives and development strategy

In order to quantify the degree to which public administration employees are informed about the purposes, objectives and development strategy of the organization in which they carry out their activities, the variable X_1 is defined. This variable is calculated in relation to three primary variables that measure knowledge: the knowledge of the purpose of the organization, of its objectives and development strategy - which are established in advance. This variable is measured on a scale from 0 to 4. The lowest value is 0, which corresponds to the unfavorable situation in which the public administration employee considers that knowing the purposes, objectives and development strategy of the institution is not important. The highest value is 4, which corresponds to the favorable situation in which the public administration employee considers that it's very important to know the institution's purposes, objectives and development strategy.

A mean of 3.27 and a variance of 1.06 were obtained for this variable as a result of processing the data series at sample level. The average level of this characteristic indicates a high degree of transparency at the level of public institutions with regard to the knowledge of the development strategy of public administration institutions.

3.2. Budgetary performances of public institutions

The budgetary performances of public institutions are quantified using a level two variable, symbolized by X_2 determined by taking into account the budgetary performances of public institutions, the observation of the institution's development program and budget, the quality of the strategic financial planning component from a multi-annual perspective and the degree to which the activities within the institution are oriented towards efficiency. The values of the variable are assessed on a measurement scale with 0 as the lowest value, a value which corresponds to the situation in which the budgetary performances of a public administration institution are not satisfactory and with 4 as the highest value, for the case in which the budgetary performances of the institution are very good.

The average level of this variable - 2.87 - shows that public administration employees have a relatively favorable opinion of the budgetary performances of the institutions in which they work.

3.3. The capacity of public administration institutions to establish quality relations with the beneficiaries

The overall assessment of the quality of the relations of the institution with the beneficiaries is quantified by the variable X_3 . This variable is defined taking into consideration elements such as the degree to which the staff is informed about the needs and expectations of the beneficiaries, the institution's capacity to periodically consult the beneficiaries with regard to the quality of the services provided and the institution's capacity to receive suggestions from the beneficiaries. The measurement scale ranges from 1, which corresponds to the situation in which the institution's relations with the beneficiaries are very bad and 5, for the case in which the institution's relations with the beneficiaries are very good.

The average level of this variable - 3.77 - shows that the relations of the public administration institution with the beneficiaries of the services it provides are relatively good.

With regard to the quality of the activities carried out by public administration institutions, a variable that takes into account the three variables previously defined (X_1), (X_2), and (X_3) was created. This new variable symbolized as C_1 , is calculated as an arithmetic average of the first three variables and has values ranging between [0-5].

In Table 1, the means and standard deviations for the characteristics used to quantify the quality of the activities carried out by public administration institutions are calculated by the type of institution, gender and staff category (managerial or non-managerial position). The table also presents the values of the F statistics calculated with the ANOVA analysis, used to establish if there are significant differences at the level of the groups of public administration employees. Thus, the following three characteristics

were used for grouping public administration employees: the type of institution in which the employee works (central public administration (CPA), County Councils (CC), Prefects' Offices (PO) and decentralized public services (DPS)); the person's gender and the staff category - managerial (MS) or non-managerial category (NMS). The values of this statistics, alongside the significance threshold, are presented in the table only for the cases in which there are significant differences between groups.

Table 1. Characteristics of the variables used to describe the quality of the activities carried out by public administration institutions

		X ₁	X ₂	X ₁	C ₁
Type of institution					
	CPA	2.99(0.69)	2.51(0.93)	3.19(0.74)	2.90(0.60)
	CC	3.08(0.58)	2.93(0.69)	3.45(0.55)	3.16(0.47)
	PO	2.89(0.65)	2.48(1.16)	3.39(0.64)	2.92(0.57)
	DPS	2.99(0.70)	2.68(0.87)	3.34(0.72)	3.00(0.58)
F statistics and p value			3.396(0.01)		2.540(0.04)
Gender					
	M	3.07(0.65)	2.81(0.78)	3.44(0.64)	3.10(0.52)
	F	2.95(0.69)	2.62(0.94)	3.28(0.73)	2.95(0.50)
F statistics and p value		2.389(0.09)	3.883(0.02)	4.256(0.02)	5.609(0.01)
Staff category					
	NMS	2.90(0.70)	2.56(0.95)	3.25(0.72)	2.90(0.5)
	MS	3.15(0.60)	2.94(0.71)	3.48(0.63)	3.19(0.49)
F statistics and p value		19.764(0.00)	27.399(0.00)	14.888(0.00)	36.805(0.00)

The results obtained after processing the data series (results presented in the above table) lead to the following conclusions regarding the capacity of public administration to fulfill its basic functions:

- (i) the employees have a favorable opinion regarding the activities performed by public administration institutions;
- (ii) the appreciation is much higher at the level of the managerial staff, compared to the non-managerial staff;
- (iii) men's opinion of the objectives, the budgetary performances and the quality of the relations with the beneficiaries of the services provided is much favorable than the women's opinion (the value of the significance threshold is $p < 0.02$ in all cases, except with regard to the knowledge of the objectives and development strategy of the institution in which they work, case in which the significance threshold is $p < 0.09$);
- (iv) the most favorable opinion on this issue is expressed by County Councils' employees;
- (v) the non-managerial staff have a less favorable opinion of the budgetary performances of the institutions in which they work. Moreover, their opinion is completely different from that of the managerial staff. The same less favorable opinion on this matter is shared by the central public administration staff and by the staff working in the Prefects' Offices.

In fact, the diagnosis analysis revealed the existence of financial restrictions in carrying out the current activities and in implementing of reform measures, the ministers' excessive focus on the current activities and the lack of efficient communication among

them in addressing inter-ministerial issues. In addition, public administration activities are insufficiently planned because institutions are interested especially in solving the problems that appear along the way. Another measure aimed at increasing the planning capacity of public institutions at central and county level was the introduction of multi-annual modernization program starting with 2004.

3.4. The system for evaluating performances applied at the level of institutions

In order to evaluate the quality of the system to determine the performances of public administration institutions, the following were taken into account: the quality of the system for evaluating the performances of the public institution as a whole and the quality of the annual evaluation of the activities carried out by its employees. The variable X_4 is defined on a scale of 0 to 4. The minimum value of the measurement scale (0) shows that the employees have an unfavorable opinion of the system for evaluating performances, and the value 4 indicates a very favorable opinion.

The average level of this variable is 3.08, which reveals that public administration employees have a good opinion of the systems for evaluating the performances of public institutions. The means for the two primary characteristics are 2.97 and 3.19, respectively. The value of the Pearson coefficient, which estimates the correlation of the primary variables, is 0.696, significantly differing from zero for a significance threshold of 0.01. The results of the study reveal a progress in the functioning of public institutions, namely the improvement of the system for evaluating the performances of the institution and of its employees, considering that the diagnosis analysis made at the level of public administration in 2004 showed an insufficient application of the performance indicators in the evaluation of civil servants. The action plan of the reform strategy stipulated the standardization of the procedures to ensure a unitary practice in the evaluation of civil servants, a fact that led to the current situation. In this context, the President of the National Agency of Civil Servants issued Order No. 206/2005 on the approval of the methodology and criteria for the evaluation of the work of civil servants.

3.5. Transparency of public administration institutions

In assessing the transparency of public administration, the following aspects were taken into account: the employees' knowledge of the decision-making rules, the quality of the communication between the employees and the managerial staff of the institution and the extent to which the access of each employee to public information or to information related to the functioning and strategic development of the institution is ensured. Based on the three primary characteristics a new variable was introduced (symbolized by X_5), using a measurement scale with values ranging from 0 to 4. The 0 corresponds to a totally unfavorable situation, and 4 to a very favorable opinion of the transparency of central and local public administration institutions.

We obtained an average value for this characteristic of 3.09, which indicates that public administration employees have a positive opinion of the transparency of decisions in public administration institutions. The standard deviation calculated for this variable is 1.169.

Considering that the existence of a system of indicators and its application in evaluating the performances of the institution and of its employees represents a factor which facilitates the transparency of an institution, a new variable - C_2 - was defined to assess this aspect of the functioning of public administration institutions (the measurement scale ranges from 0 to 4). We hypothesized that the higher the value of this variable, the higher is the transparency level of the decisions made in public institutions.

Considering that the periodical issuance of a newsletter by the public administration institution is a factor that contributes to the improvement of the communication process and to the increase in transparency, a new variable - symbolized by C'_2 - was defined. This variable is calculated based on the variable C_2 and on a new variable that can take three values: 1 if the institution issues a newsletter on a permanent basis, 0 if this practice does not exist and -1 if the employee doesn't know if such a communication tool exists. This negative correction (one point) is applied to penalize both the institution (because it does not issue a newsletter) and the employee (because he is not interested in what happens within the institution). For the variable that characterizes the issuance of a newsletter by the institutions, the following distribution of responses was obtained:

Table 2. Characterization of the issuance of a newsletter by institutions

Response	- 1	0	1	Non-responses
Share of responses (%)	31.3	10.0	50.5	2.3

The means and standard deviations for the four characteristics used to assess the transparency of public institutions are calculated in a similar way to that used for analyzing the quality of the activities carried out by public administration institutions. The indicators are broken down by type of institution, gender and staff category (managerial staff and non-managerial staff). The values for the two indicators as well as the values of the F statistics and of the significance threshold are presented in the following table:

Table 3. Characteristics of the variables that describe the quality of the activities of public administration institutions

		X_4	X_5	C_2	C'_2
Type of institution					
	CPA	2.86(1.07)	2.99(0.89)	2.93(0.89)	1.90(2.52)
	CC	2.90(0.71)	2.86(0.80)	2.88(0.63)	2.71(2.78)
	PO	2.98(0.95)	3.14(0.84)	3.06(0.79)	2.32(3.79)
	DPS	2.91(0.96)	2.98(0.88)	2.95(0.78)	1.91(2.53)
F statistics and p value					2.502(0.04)
Gender of the person					
	M	3.05(0.87)	3.13(0.78)	3.09(0.73)	2.30(2.73)
	F	2.83(0.97)	2.90(0.91)	2.87(0.81)	1.89(2.65)
F statistics and p value		6.653(0.00)	7.224(0.00)	8.957(0.00)	2.603(0.08)
Staff category					
	NMS	2.79(0.99)	2.86(0.91)	2.83(0.81)	1.94(2.81)
	MS	3.14(0.81)	3.21(0.75)	3.18(0.68)	2.22(2.45)
F statistics and p value		29.119(0.00)	33.335(0.00)	41.788(0.00)	

The results above indicate the following:

- (i) the employees opinion regarding the quality of the performance evaluation system' of their activity and of the transparency of decisions made by public institutions is similar irrespective of the institution in which they work;
- (ii) however, women have a less favorable opinion of these aspects, compared to men;
- (iii) the opinion of the non-managerial staff and that of the managerial staff are significantly different;
- (iv) in most cases (more than 50%), at the level of central public administration; {CPA) and decentralized public services (DPS) there are no newsletters for the: employees.

3.6. The pressure of political system on public administration

Two statistical variables were defined in order to measure the pressure that political system puts on public administration through the politicians' intervention in the trade-union movement of public administration and the hiring and promotion of the public administration staff in/to management positions (X_6), as well as in order to quantify the transformations in public administration due to political changes (X_7).

The variable (X_6) is defined taking into account three elements that quantify the pressure put on central and local public administration by the political system through the following means: (i) the trade-union movement of public administration; (ii) the hiring and promotion of the staff in/to management and non-management positions. The values of the variable range from 0, case in which the political environment puts no pressure on the members of the examination commissions, to 4, which corresponds to the situation in which the hiring and promotion of a person in/to a civil service position is the result of the influence of the central or local level political system on the examination commissions.

A low value of the mean of this characteristic corresponds to a small influence of the political environment on the examination commissions. At the level of the sampled population, we obtained a mean for this characteristic of 1.790 and a standard deviation of 1.45. These values show that the examination commissions set up for hiring and promoting the public administration staff faced considerable political pressure.

These results are in accordance with the results from different studies and researches conducted on the public administration by different national and international organizations. Hence, the diagnosis analyses made at the level of public administration as well as the Country Reports of the European Commission up to 2004 revealed major drawbacks in civil service management, which does not encourage the development of the civil service based on modern methods of recruitment, promotion and evaluation of civil servants. The process of recruitment and promotion of civil servants was seldom neutral (from a political point of view) and transparent. Some of the major drawbacks of the system of recruitment and promotion of civil servants are: the lack of a national competition organized on a yearly basis for filling public administration vacancies; the poor organization of the competitions; the staff in charge of the recruitment, promotion and evaluation of civil servants is insufficiently qualified for this task etc.

In fact, most of the changes in the structure of the Government (Newspaper "Cotidianul", May 28, 2007, "Orban, the champion of dismissals: 11 directors in 40 days") also generated changes at the level of the technical management of ministries. This practice was common to all Governments since the fall of communist regime.

The variable that measures the transformations in public administration due to political changes is defined in relation to the variables, which measure the changes that occurred at the level of budget management, the management of services and staff policy because of local or general elections.

Table 4. Characteristics of the variables that describe the pressure put on public administration by the political system (X_6 and X_7) and the decentralization process (X_8 and X'_8)

		X_6	X_7	X_8	X'_8
Type of institution					
	CPA	1.61 (0.82)	2.09 (1.01)	2.43 (0.67)	2.36 (0.59)
	CC	1.25 (0.70)	2.24 (0.93)	2.78 (0.48)	2.73(0.44)
	PO	1.30 (0.77)	1.88 (0.82)	2.69 (0.54)	2.58 (0.52)
	DPS	1.35 (0.76)	1.93 (0.89)	2.61(0.58)	2.56 (0.53)
F statistics and p value		4.129 (0.003)	2.789 (0.03)		7.257 (0.000)
Gender of the person					
	M	1.37(0.78)	2.4(0.95)	2.65(0.54)	2.64(0.54)
	F	1.38 (0.75)	1.95(0.93)	2.58(0.61)	2.50(0.53)
F statistics and p value					7.352(0.001)
Staff category					
	NMS	1.38(0.78)	1.96(0.91)	2.59(0.61)	2.50(0.53)
	MS	1.37(0.73)	2.00(0.90)	2.63(0.55)	2.65(0.53)
F statistics and p value					14.279(0.000)

Based on the recorded data, an average level of this characteristic of 2.140 and a standard deviation of 1.034 were obtained. Between the two variables X_6 and X_7 there is a significant linear dependency. The value of the Pearson correlation coefficient is 0.327, which considerably differs from zero for a significance threshold of 2%;

Based on the results in the above table, we make the following observations:

(i) the influence of the political system is much more obvious at the level of central public administration than at the level of County Councils, Prefects' Offices and decentralized public services (the value of the variable X_6 is 1.61, a much higher value than in the other three cases, and the significance threshold of the F statistics is $p < 0.03$);

(ii) the perception of the civil servants with regard to the pressure put an public administration by the political system is not very different across the groups defined according to gender and staff category (managerial staff or non-managerial staff). The staff of County Councils in particular are of the opinion that the political transformations that took place as a result of elections led to significant changes at the level of budget management, service management and staff recruitment

3.7. The decentralization process

An important variable used for analyzing the characteristics of the decentralization process is defined in relation to ten primary variables which measure

the capacity of public administration to manage public goods at local level, to administer public funds at local level, to provide public services in the fields of health, social assistance, education, culture, public order, civil protection, forecasting and socio-economic development, and its organizational capacity. This variable is symbolized by X_B and is defined on a measurement scale with values ranging from 1 to 4. The closer the value of the characteristic X_B is to 4, the greater the capacity of public administration to fulfill its basic functions. For the values recorded at sample level, a mean of this characteristic of 2.610 and a standard deviation of 0.590 were obtained, which shows a relatively low capacity of public administration to fulfill its basic functions.

Considering the importance of financing of public services for providing quality services, a new variable is defined with a view to assessing the quality of the decentralization process. This variable is calculated in relation to the variable X_8 and to the variable that measures the capacity of the current financing system to meet the needs of central and local public administration institutions. A small value of this variable is equivalent to a low capacity of the current financing system to ensure the good functioning of public administration.

The average value of this characteristic at sample level is 2.53 and the standard deviation is 0.620. These values reveal a series of major drawbacks of public administration with regard to its capacity to fulfill its basic functions and a poor adjustment of the financing system to the needs of public administration institutions. In fact, the reform strategy states that, in the field of decentralization, the adequate financial resources have not been transferred and the transferred competences and decentralization levels have not been clearly established. Thus, reform measures have been set in order to support the strengthening of local autonomy of local public authorities through: the increase in the share of own income at the level of local administrations to more than 50%, the improvement of the system of financing investments at local level, of budget management and of local-level reporting etc.

As a support for the decentralization process, Romania received funds from European Union and World Bank through different programs:

- (i) The 1992 Phare Program, a project of 1.5 million Euros, was carried out in order to consolidate the training capacity to the benefit of the local public administration staff, to enable the development of local authorities and of their management abilities, and to ensure the development of documentation centers and publication of information.
- (ii) The 1997 Phare Program, a project through which 5 million Euros were allocated to support local administration to apply the subsidiarity and local autonomy principles.
- (iii) The 2002 Phare Program entitled "The decentralization and development of local public administration in Romania" was carried out. The aim of the project (which amounted 4.73 million Euros) was to support the local fiscal decentralization by transferring the responsibilities for coordinating some activities as autonomous financing sources are created at local level.
- (iv) The 2004 Phare Program, the projects "The decentralization and deconcentration process, coordinated by central administration" (with a budget of 1.4 million Euros) and "The strengthening of financial autonomy of local authorities by

continuing fiscal decentralization" (with a budget of 1.2 million Euros) are being carried out.

- (v) Through the 2005 and 2006 Phare Programs two projects are being carried out: "The Management of the fund for the development and modernization of local administration" and the "Fund for the development and modernization of local administration - non-reimbursable financing scheme for local administration".
- (vi) Through the PAL Program of the World Bank a series of activities that supported the development of the institutional framework necessary for the carrying out of the decentralization process were performed.

3.8. The civil service

In order to measure the quality of civil service as well as the impact of civil service reform on corruption, three variables are defined by taking into account the following aspects: the degree of satisfaction of public administration employees, the quality of work relations and a number of aspects that are strictly related to civil service reform.

A. A variable that measures **the degree of satisfaction of civil servants** was created by taking in to account the following: the material satisfaction of the employee with regard to the monthly income received, the respect showed by colleagues, bosses and citizens at the workplace, and the work satisfaction due to the conditions in which he carries out his activities. To be more precise, in the definition of this variable the following aspects which directly contribute to the level of satisfaction of the public administration employees were taken into account: the monthly average income of the public administration employee, the respect showed by colleagues, citizens, the direct boss and the managerial staff of the institution, the working conditions of the employee. In order to assess the employees' satisfaction with the conditions in which he performs his/her work, the following criteria were taken into consideration: the quality of office conditions, the quality of the office computer and the quality of the Internet connection. This variable is defined on a measurement scale with values ranging from 1, case in which the employee is completely dissatisfied, to 5, corresponding to the situation in which the employee is very satisfied. As a result of processing the data series, means and mean standard deviations are obtained for the variables defined above. They are presented in Table 5.

Table 5. Means and standard deviations for the variables that quantify the degree of satisfaction of public administration employees

Variable	X ₉	X ₁₀	X ₁₁	C ₃
Mean	2.30	3.59	3.43	3.108
Standard deviation	1.003	0.756	1.016	0.678

The results show the employees' moderate level of satisfaction with the three factors considered. The drawbacks of the current remuneration system for public administration employees make a negative contribution to the satisfaction of public administration employees. A negative but much more moderate contribution results

from the material conditions provided to the employees at the workplace. The positive influence comes particularly from the respect showed to a public administration employee by his colleagues and bosses and by the citizens.

B. The quality of work relations is an important aspect for the civil service. Within the analysis, the quality of the work relations of an employee is assessed by taking into account the quality of the work relations with the colleagues from the same, department, with those from other departments, with the direct superior, with the head of the institution, with the clients and with persons from similar institutions. The degree of satisfaction of public administration employees with regard to the quality of work relations was measured on a scale with 4 values, ranging from 1 to 4. The minimum value is attributed to the case in which the employee is completely dissatisfied with the quality of work relations. The variable C_4 was calculated to measure the overall quality of work relations of public administration employees (taking into consideration the six types of work relations).

At the level of the sampled population, an average level of 3.31 and a standard deviation of 0.51 were calculated for this characteristic. The two descriptive measures reveal good work relations at the level of civil servants.

C. Civil service reform is one of the major priorities of the reform of public administration in Romania, consisting in the improvement of civil service management and of the continuing vocational training of civil servants. The major drawbacks at civil service level are grouped on the following categories: (i) the lack of unitary regulations for the public administration staff; (ii) the lack of a stable and efficient remuneration system for civil servants - a system to be applied over a long period of time; (iii) the management of the civil service - which does not fully ensure the fairness of the recruitment, promotion and evaluation of civil servants; (iv) the training of civil servants; (v) the mobility of civil servants.

The questionnaire included questions to measure the respondents' opinion on an important issues related to civil service reform. Based on the answers to these questions, variables were defined in order to characterize some aspects important to the civil service reform.

In order to measure the quality of the organization and unfolding of competitions for recruitment and promotion to the civil service, the variable C_9 is defined on a measurement scale with values ranging from 1 to 4. This variable provides information on specific aspects related to the recruitment and promotion to the civil service, such as the size of the influence of the persons within the institution on the recruitment or promotion to the civil service, the size of the influence of the political environment, some candidates' practice of offering gifts or money to persons who can influence the decisions made in the competition and the poor organization of the competition. A measurement scale from 1 to 4 is used for this variable. Value 1 corresponds to the case in which there is no influence on the recruitment or promotion to the civil service and 4 is for the situation in which the recruitment or promotion to the civil service is mainly the result of the influence exercised.

At the level of the sampled population, the means and standard deviations were calculated for the five primary variables used to characterize the organization and unfolding of competitions for recruitment and promotion to the civil service.

Table 6. Measuring of the level of intervention in the unfolding of competitions for recruitment/ promotion to the civil service

	Types of influence exercised			
	Internal	Political level	Gifts offered	Poor organization
For recruitment to the civil service				
Mean	2.11	1.90	1.40	2.47
Std. deviation	0.991	0.040	0.765	1.197
For promotion to the civil service				
Mean	2.35	1.92	1.41	2.38
Std. deviation	1.037	1.033	0.780	1.218

Another three level variable is defined for assessing the degree to which civil service reform encourages the aspects that will shortly contribute to its modernization. Some of these aspects are: stimulating young people's interest in filling civil service positions, encouraging mobility at the level of the civil service, improving the continuing training, the degree to which civil service reform contributes to the reduction of corruption, the increase in transparency and the development and better use of the potential of civil servants.

The variable, symbolized by C_{10} , is defined on a measurement scale with values ranging from 1 (the minimum value - which corresponds to the favorable situation in which civil service reform greatly encourages the modernization of this field) to 5 (the maximum value - which corresponds to the situation in which the reform process doesn't encourage the modernization of the civil service).

Table 7. Characteristics of the variables that describe aspects related to the civil service

		X_9	C_3	C_4	C_9	C_{10}
Type of institution	CPA	2.51 (1.07)	3.21(0.66)	3.29(0.51)	2.11 (0.75)	2.74(0.95)
	CC	2.1(0.98)	3.20(0.59)	3.31(0.48)	1.93(0.67)	2.69(0.85)
	PO	2.68(0.96)	3.41 (0.61)	3.43(0.49)	1.05(0.60)	2.56(0.90)
	DSP	2.61(0.96)	3.00(0.67)	3.28(0.52)	1.99(0.70)	2.64(0.92)
F statistics and p value		6.588(0.00)	8.264(0.00)			
Gender of the person	M	2.39(1.00)	3.15(0.66)	3.32(0.49)	1.96(0.66)	2.64(0.94)
	F	2.22(1.01)	3.06(0.67)	3.30(0.51)	2.02(0.71)	2.67(0.90)
F statistics and p value						
Staff category	NMS	2.15(1.00)	3.01(0.69)	3.27(0.51)	2.05(0.70)	2.68(0.90)
	MS	2.54(0.97)	3.28(0.59)	3.37(0.49)	1.92(0.66)	2.60(0.93)
F statistics and p value		26.770(0.000)	29.953(0.000)	6.453(0.01)	6.454(0.01)	
For public administration overall		2.29(1.01)	3.10(0.68)	3.30(0.51)	2.00(0.69)	2.66(0.91)

From processing the data series, the means and standard deviations for the primary and aggregate variables used to characterize important aspects of civil service reform were obtained. The indicators are calculated both for public administration overall and by groups of employees defined according to certain characteristics.

Table 8: Characteristics of the primary variables and of the aggregate variable used to describe aspects of civil service reform

	Q ₄₈₁	Q ₄₈₂	Q ₄₈₃	Q ₄₈₄	Q ₄₈₅	Q ₄₈₆
Mean	2.98	2,86	2.36	2.68	2.56	2.50
Std. Deviation	1.162	1.033	1.032	1.209	1.132	1.076

The high values of the means of the two variables reveal an inefficient reform process from the point of view of civil service modernization.

4. The analysis of corruption in public administration

In the economic literature, a special attention is given to the studies related to the measuring of corruption and of its impact an economy as a whole or an some activity sectors in particular. Thus, there are papers that estimate the impact of corruption an economic growth (Schleifer and Vishny, 1993; Mauro. 1995). on military expenses (Gupta, Mellon and Sharan, 2001), on the public health and education systems (Gupta, Davoodi and Tiongson, 2000), on the development of industry in poorly developed countries (Emerson, 2002), on foreign direct investment (Wei, 1997) and on the quality of life and poverty (Gupta *et. al.*, 1998) etc.

For the analysis of the corruption phenomenon, a series of questions measuring the opinion of public administration employees with regard to the level of corruption, of the factors that generate corruption and of the economic and social consequences of this phenomenon were included in the questionnaire. Three level-three variables were defined using the primary information.

4.1. The level of corruption by activity sector

Variable C₅ is defined to measure the level of corruption. This variable has a measurement scale ranging from 1 (corresponding to a low level of corruption) to 5 (for generalized corruption). The public administration employees' opinion with regard to the level of corruption in education, health, politics, local public administration, central public administration and in their own institution is taken into account in defining this variable.

The average level of this characteristic is 3.20 and the standard deviation is 0.80. The equivalent of this value on the TCI index scale leads to the value 3.6. In other words, relatively similar results are obtained in the two measurements. In general, TCI values are situated between 3.0 and 3.4, which places Romania among the European countries with the highest level of corruption. With a view to making the shift from the measurement scale used in this study for measuring corruption to the TCI scale, the following calculation relation was applied:

$$(5-3.2) \cdot \frac{10}{5} = 3.6$$

4.2. The effect of corruption on the economic and social environment

With a view to measuring the public administration employees' opinion of the negative effect of corruption on the economic and social environment, the questionnaire included questions based on which a series of primary variables were defined. These variables quantify the negative effect of corruption on local development, national development, the quality of education, the public health system, the quality of the political environment, the quality and image of local and central public administration. The variable that measures the effects of corruption is symbolized by C_6 and is calculated on a measurement scale with values ranging from -2 which corresponds to a negative effect of corruption, to 2, for the case in which the respondents consider that the corruption phenomenon has a series of positive effects on the socio-economic environment.

The average level of the aggregate variable (-1.06) shows that corruption has a negative effect on the Romanian economic and social environment. The standard deviation of this variable is 0.91.

4.3. The contribution of some factors to the reduction of corruption

With a view to reducing the level of corruption in a country, a variety of strategies can be developed. These strategies have the following aims: creating new institutional structures and improving the legal framework for combating corruption, making the state structures more efficient both by setting up efficient institutions at central and local level and by modernizing the civil service, reforming the political class, creating and developing - at the level of civil society - non-governmental institutions to support the fight against corruption etc.

Mass media plays an important role in the fight against corruption by supporting the increase in the transparency of decision-making process at public level. The cultural factors and the mentality of the people from a country or an area directly contribute to the high level of corruption. With a view to measuring the influence of some factors on the reduction of corruption, primary variables were defined based on the questions from the questionnaire. These variables quantify the civil servants' opinion on the influence of mass media, school, church, the central and local-level political class, the state's representatives/the civil servants who work in central and local public administration and the citizens on the reduction of corruption. For the purpose of measuring the primary variables defined above, a measurement scale with five values is defined, ranging from -2 (corresponding to the case in which the effect of the factor considered does not contribute to the reduction of corruption) and 2 (for the case in which the factor considered greatly contributes to the reduction of corruption). Based on the above-mentioned variables, an aggregate variable (C_a) which measures the influence of the factors considered on the reduction of corruption is defined.

The average level obtained for this characteristic is 0.22, and the standard deviation is 0.82. The average value of this characteristic shows an insignificant influence of the factors that contribute to the fight against corruption at the level of Romanian society. With regard to the eight factors considered, the following values were calculated for the average level and the standard deviation.

Table 9. Characteristics of the factors that contribute to the reduction of corruption

Variable	Q ₅₆₁	Q ₅₆₂	Q ₅₆₃	Q ₅₆₄	Q ₅₆₅	Q ₅₆₆	Q ₅₆₇	Q ₅₆₈
Mean	0.89	0.68	0.74	-0.43	-0.29	-0.02	0.13	0.17
Std. deviation	1.072	0.890	0.940	1.356	1.280	1.241	1.191	1.185

Mass media plays a significant positive influence on the reduction of corruption, while the behavior of the central-level political class does not encourage the reduction of corruption. Moreover, their behavior generates and encourages corruption. The behavior of central and local public administration employees is situated in a neutral area from the point of view of the efforts to reduce corruption.

5. Conclusions

Most of the variables used in this study reveal significant differences at the level of the four types of public administration institutions. Thus, if we consider the conclusions drawn based on the ANOVA analysis, these differences are obvious for the level-three variables used to analyze the quality of the activities carried out by public administration institutions (variable C₁, for which the significance threshold of the *F* test is $p < 0.04$ the transparency of public institutions (C'₂, $p < 0.04$) the satisfaction of public administration employees (C₃, $p = 0.00$) the level of corruption (C₅, $p = 0.00$) and the perception of the effects of corruption an the social and economic environment (C₆, $p < 0.07$). This observation recommends that the regression models be defined both for public administration overall and for the four types of public administration institutions.

Table 10. Characteristics of the variables that describe aspects related to the civil service

		C ₅	C ₆	C ₈
Type of institution				
	CPA	3.36(0.82)	-1.08(0.9)	0.22(0,82)
	CC	2,79(0.74)	-0.87(0.95)	0.30(0.75)
	PO	2.98(0.75)	-0.99(0.88)	0,88(0.78)
	DPS	3.19(0.80)	-1.13(0.86)	0,21 (0.81)
F statistics and p value		4,863(0.001)	2.241 (0,07)	
Gender of the person				
	M	3.09(0.74)	-1,04(0,88)	0,25(0.84)
	F	3.24(0.83)	-1.09(0.92)	0.20(0.78)
F statistics and p value		.496(0.03)		
Staff category		3,22(0.83)		
	NMS		-1.10(0.90)	0.80(0.81)
	MS	3.11(0.74)	-1.02(0.92)	0.27(0,79)
F statistics and p value		3.544(0,06)		
Civil service reform				
	GR ₁ =(3.67 5.00)	3.71(0.93)	-1.35(0.99)	0.20(0.73)
	GR ₂ =(2.33 3.67)	3.44(0.82)	-1,07(0.95)	0,03(0,80)
	GR ₃ =(1.00 2.3)	3,02(0.75)	-1,05(0,88)	0,31 (0.79)
F statistics and p value		28.107(0,00)		10.062(0.00)

Transparency in public administration	GT ₁ =(0.00 1.33)	3.89(0.63)	-1.38(0.94)	-0.23(0.98)
	GT ₂ =(1.34 2.67)	3.47(0.71)	-1.12(0.92)	0.05(0.73)
	GT ₃ =(2.68 4.00)	3.00(0.80)	-1.03(0.89)	0.32(0.81)
F statistics and p value		41.875(0.00)	2.470(0.09)	13.731(0.00)
For public administration overall		3.172(0.81)	-1.07(0.91)	0.22(0.81)

The same observation is valid when defining the groups of public administration employees according to gender. Thus, differences appear in the level-two variable used to analyze the budgetary performances of the institution (X_2 , $p < 0.01$), the magnitude of the pressure put on public administration by the political system (X_6 , $p < 0.03$), the transformations in the system due to the political changes that were brought about by local and national elections (X_7 , $p < 0.03$) and the public administration employees' satisfaction resulting from the monthly income obtained by them (X_9 , $p = 0.00$).

The intensification of the reform process at civil service level leads to the reduction of the level of corruption. The highest level of corruption is recorded for the group of employees that was least affected by the reform process. In fact, among the groups of employees defined in relation to the size of the impact of the reform process (GR_1 , GR_2 and GR_3) there are significant differences in evaluating the level of corruption in the system ($p = 0.00$). The analyses made at administration level reveal the fact that the low salaries, the discretionary regulations for public administration employees and the lack of alternative tools for motivating civil servants are important factors that cause a high level of corruption in the system.

An important factor that generates corruption in the system is represented by the lack of transparency at the level of public administration institutions. Thus, as the results presented in Table 10 show, the greater the transparency of decisions, the lower the level of corruption. The size of corruption is different among the groups of employees defined according to the level of transparency (GT_1 , GT_2 and GT_3), case in which the value of the significance threshold is $p = 0.00$. One of the major midterm objectives set out in the reform strategy was "The improvement of the image of public administration by increasing the transparency of administrative operations and by taking firm anti-corruption measures, which should be visible to the public"¹.

The level of satisfaction of civil servants can be significantly improved by adopting an attractive and stable remuneration system. In fact, of the three dimensions of the degree of satisfaction of the civil servant (salary, respect in the workplace and working conditions), the first has the lowest level. The mean of this variable is only 2.30, while the values recorded for the other two variables are 3.59 and 3.43 respectively. And, the last but not the least, the financing system of public administration does not meet the needs of public administration institutions.

¹ Updated Government Strategy on the Acceleration of Public Administration Reform 2004-2006, Bucharest, p. 6.

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