

CRITERIA OF ECONOMIC AND SOCIAL EFFICIENCY OF PUBLIC ADMINISTRATION IN ROMANIA

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Abstract: *The present paper represents an synthesis of the research study entitled CRITERIA OF ECONOMIC AND SOCIAL EFFICIENCY OF PUBLIC ADMINISTRATION IN ROMANIA, developed within 'Economic and social criteria of regionalization and local development in Romania' Priority Programme of National Institute of Economic Research "Costin C. Kiritescu" (2016).*

The objectives of the research paper are in agreement with current national strategic priorities, regarding to modernization and efficiency of public administration in Romania. The paper aims to present, from a theoretical and practical perspective, the importance which public administration has within economic systems which are continuously under the influence of political, local or central factors, which decide from a period to another, the proportion of resources allocation needed to achieve various objectives of social or economic nature.

Keywords: *public sector, public administration, administrative reform, welfare, economic efficiency*

JEL Classification: *H10, H11, H41, H50*

1. Introduction

Public administration has crucial importance in the context of efforts made to identify the most appropriate instruments for strengthening and stimulating economic growth, on the coordinates imposed by the current global transformations. In order to meet these

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challenges, it is necessary to reform public administration through organizational restructuring, through proper management of the human resources employed, of public finance, through decentralization and legislative result-oriented reforms. By means of the objectives pursued (health, education, culture, defense and public order, infrastructure), the administration has an important role in the sustainable economic and social development. In a modern state, public administration has a new role as determined by the changes occurred in the evolution of human society, which has made their mark on its characteristics, as follows:

1. *Industrial Revolution* led to the increase of urbanization of large cities and to the emergence of strong administration;
2. *Changes in political philosophy* (from minimalist state interference, laissez-faire and up to the state perfectly integrated in the economy) have focused on the effects and outcomes;
3. *The emergence of new alliances between states*, as international organizations (EU, UN, etc.) has led to the reform of public administration objectives within national territories, including worldwide;
4. *Global population growth* has put pressure on existing resources, requiring in a stringent manner the introduction of efficiency criteria in public administration specific activities and areas.

Aiming at ensuring a certain level of efficiency of activity, the current management of any modern public administration is based on the following assumptions: the resources spent must find their best use, respond to long-term needs, adapt quickly to new conditions.

Through the new forms of management and their innovative principles, public administration has evolved constantly and permanently, becoming a dynamic form of government. This fact is visible in particular in developed countries, which are characterized by a strong public administration, contributing to the increase of the overall level of social welfare.

The research paper entitled ***Criteria of economic and social efficiency of public administration in Romania*** aims to analyze, theoretically and practically, the efficiency of public administration, the determinants, the institutions involved, the resources and conditions necessary for good governance. The specific objectives are:

Specific objective 1: presentation, synthetical, of the relevant theories of public administration (principles, representatives, influences and trends);

Specific objective 2: identification of specific techniques and methods for determining the efficiency and effectiveness of public administration;

Specific objective 3: comparative analysis of the main categories of public administration expenditure, from the European Union and Romania;

Specific objective 4: conclusions on the effectiveness of public administration in Romania; possible directions for reform.

Using the statistical information existing in national, EU databases and specific reports of the World Bank, IMF, etc., the research paper examines the relevant issues of the evolution and development of public administration, in the context of recent changes recorded nationally and globally.

2. Public Administration – Theoretical approach

The theoretical view of an economic and social phenomenon is a prerequisite indispensable to any scientific approach, helping to improve the practical aspects.

In the general theoretical approaches, public administration plays a special role due to its eclectic and multi-dimensional character. The evolution in time of main forms of public administration models can be grouped in two main phases:

- **The stage of classical theoretical approaches** (period 1800-1950);
- **The stage of modern theories** – with sub-stages: (a) 1950-1960 – overall development of public administration, (b) from 1960 to 1970 – *The New Public Administration*, (c) 1980-1990 – *New Public Management* (reinventing government) (d) after 1990 - modern public administration and good governance.

In the classical approach, public administration is seen as an organized system, consisting of institutions, mechanisms, resources and objectives (health, education, infrastructure, etc.), as a system that supports state functions in a stable and predictable manner. Among the main representatives, we can mention Woodrow Wilson (USA) (who first introduced the idea of public administration), Frederick Winslow Taylor (USA) and Max Weber (Germany). This classical model has the following main characteristics:

1. *the strict bureaucratic hierarchy* with permanent employees and neutral or anonymous officials, motivated by the public interest, serving the party and administering its policies;
2. *the conditioning of the public administration by personal relationships*, that is of loyalty to some people well-recognized in the society: ministers, kings, leaders (the stage is known as the Era of *nepotism* or *patronage*).

In the classical model, Weber M. defines the concept of *ideal bureaucracy* as a dominant form in a legal and rational society, where employees have an important role, while Wilson W. separates politics from administrative activity, considering that politics formulates policies, while public administration implements them, a clear distinction between the two being required. This delimitation cannot eliminate corruption in the administration, but may influence it (Wilson, 1887). Theoretically, separation can be achieved easily, but a clear separation between the political and administrative side is difficult to make in practice. Another important theoretical approach is the efficiency of public administration which can be supported by standardization, control and an applied scientific management (standardization represented the focus of public administration work until the 40's).

After 1940, the efficiency of public administration begins to be evaluated extensively by using mathematical techniques and models. Thus, a reference model in the field is *The subjective expected utility model* (SEUM) developed by Herbert Simon (Nobel laureate in 1978 for the analysis of decision-making in economic organizations), which defines the optimal conditions that may *perfectly justify efficiency of public administration, operating under uncertainty and dependence conditions in relation to policymakers*.

The transformation of the traditional model of public administration into a modern public management form was achieved by "gradual elimination of traditional doctrines based on organized hierarchies, bureaucracy, duplicates and overlaps, and on the proximity to the *new public management* (Hood, 1996)".

The 60's marked the appearance of the new model of public administration based on principles of participation, decentralization and representative bureaucracy, on the efficient allocation of resources, on market, involving techniques used by the private sector. However, the transition from the classical model to the new public management has not been linear, but uneven, challenged and often difficult to implement (Boin, 2006).

The new public management is approached from two different perspectives (Lane, 1994): one that focuses on management reform and organizational restructuring, and the other one which focuses on market and competition (Hood, 1991 Mellon, 1993). Over time, the boundaries between the public and the private sector gradually diminished.

3. Techniques and methods for evaluating the efficiency of public administration

To meet the objectives set, public administration manages resources, which often bring into contradiction with the great needs of the society, requiring allocation decisions, including the analysis of the impact and efficiency (Zai P., 2014), and many times, using mathematical and statistical techniques.

3.1 General aspects of public administration efficiency

Any decision-making process, whether public or private, should be based on clear criteria of efficiency, with the help of which to select the best option to achieve the objective set.

In the *Theory of public choice*, making a certain choice must have a *collective character* (the decision is taken by the government or groups with decision-making authority), taking into account the Pareto optimum¹ (improvement of a situation over another). The collective approach is difficult to obtain, causing additional complications and questioning the economic reason of a community, and even though in the public economy theory, it is considered that all individual decisions are rational if one chooses the option which satisfies one of the conditions: utility maximization or costs minimization.

When the society cannot provide viable solutions to some aspects related to the life of the entire society as a whole, the state can intervene to resolve the situation through: legislation, recovery plans, changes in economic policy, control over wages, taxation etc. Social inefficiency occurs when pricing mechanism fails to take into account all costs and benefits associated to economic exchanges. Social costs represent the total costs paid by the whole society, as an effect of an economic transaction, being made up of private costs plus external costs. Social benefits include private benefits plus external benefits resulting from certain transactions.

Table 1: Key factors determining market failure

Factors	Characteristics	Examples	Forms
The situation of natural monopoly (or abuse of monopoly power)	loss of competition at certain goods / services	water, gas, electricity, rail, air, etc.	nationalization, public monopoly
Collective goods	non-rivalry non-exclusivity	infrastructure	production and public services
Information asymmetry	Information regarding the price, quantity and quality	health, auto, insurance	quality regulation, neutralizing risks
Externalities	the price does not reflect the costs and benefits; economic consequences are not taken into account	health, education, infrastructure, environmental pollution	taxes and subsidies to equal the social cost with social benefits.

Source: Processing after Moșteanu, T. et al, *Economia sectorului public (Public Sector Economy)*, Ed. Universitară, Bucharest, 2005.

¹ Pareto optimum is based on the rule of three marginal rates: • the marginal rate of substitution in consumption, the marginal rate of technical substitution • and • the marginal rate of transformation. Vilfredo Pareto, *Manuale di Economia Politica*, 1974.

Market failure occurs due to the inefficiency in the allocation of goods and services, while the failure of the pricing mechanism covers the costs and benefits involved in the provision or consumption of a particular product or service. This happens when producers are not interested in producing a good thought to be socially optimal. Market failure occurs when certain market conditions or factors that disturb the balance and that must be corrected exist (Table 1).

Among the factors shown in Table 1, externalities are the particular interest, because they reflect the best the justification for state intervention in the economy (Pigou C.A.).

3.2. Techniques and methods for evaluating the efficiency of public administration

Economic efficiency¹ is the centerpiece of the analyses on the allocation of resources, whatever their nature (Lovell, 1993). From the perspective of the public economy, efficiency refers to the optimal allocation of state resources in order to achieve a certain level of general welfare. It is well known that budgetary resources do not always meet public needs, therefore, the following question is frequently asked: what is *the optimal level of public spending and how much the State should spend in order to be considered efficient*². Responses were given as follows:

1. In "*The law of increasing state activity*"³, Wagner believes that due to industrialization, per capita income and public spending increase. Thus, the emergence of modern industrial society will generate the increase of political pressure for social progress, along with the increase of social benefits.
2. In "*The law of fiscal tolerance*" Peacock and Wiseman note that the government likes to spend money, but people do not like to pay higher taxes although they vote for the increase of social services. In those circumstances, there may be fiscal divergence and tolerance.

¹ Economic efficiency is a microeconomic concept, a relation between costs and benefits; it can be technical and / or related to allocation - technical efficiency implies a way of organizing the resources available to achieve the maximum feasible production. The efficiency of allocation relates to the use of the budget, so that, at a given price, to obtain the optimum combination of the use of existing resources.

² Theoretical and practical approaches on increasing public expenditure and their relationship with the economic growth process can be found in studies developed by Adolf Wagner (1893), Pigou A. (1928), Solow R. (1956), Peacock A., Wiseman J. (1961), Bowen W. (1965), Hough D. (1965), Meltzer R. (1981), Barro (1989), Persson (1990), Bradley J. (1996).

³ Law named after the German political economist Adolf Wagner (1835-1917).

3. Keynes believes that, in times of crisis, state intervention is necessary; the increase of public expenditure will increase production and employment;
4. According to *Pigou-Dalton (Pigou tax) principle*, allocation of public expenditure in a certain direction is based on the balance between possible benefits and disadvantages, recorded at different levels. The money raised, directly or indirectly, will return in the system under the form of public expenditure (Pigou tax is used to internalize negative externalities).

Effectiveness of public sector consists of the results obtained from the use of public resources (Afonso, 2009), being calculated using econometric techniques, based on multi-dimensional indicators, which can assess the effects in a broad sense (economic, financial, social, technological, environment, etc.), obtained by a resource unit consumption.

1. **Administration:** corruption level (*International Transparency*), bureaucracy level (*Doing Business Report*), judiciary system quality (*Global Competitiveness Report*); shadow economy (IMF);
2. **Education:** students who have completed the second cycle of secondary school, number of students (*Global Competitiveness Report*);
3. **Health:** Infant mortality, life expectancy at birth (*Global Competitiveness Report*); health system quality (*Index of European Healthcare Consumer*);
4. **Infrastructure:** infrastructure quality (*Global Competitiveness Report*);
5. **Distribution:** GDP, the rate of poverty (*World Bank Report*);
6. **Stability:** the growth rate of GDP (*World Bank Report*);
7. **Economic performance:** GDP growth stability, unemployment, public debt in GDP (*World Economic Outlook, IMF*).

By using the proposed methodology, the authors evaluated the effectiveness of the public sector in the new EU Member States, concluding that there are different levels of efficiency of public spending. However, from a political perspective, the authors of the study have not established general conclusions, but pointed out some issues, such as: a number of new Member States have increased considerably the efficiency of public spending, by improving results and restricting the use of resources.

The final conclusion of the econometric analysis shows that a high level of education, competent public employees and security of ownership, can provide an extra boost impulse for the efficiency of public spending.

4. General and specific aspects regarding public expenditure in EU Member States

Public spending is one of the main instruments that promote development, decrease of regional, national or local economic and social inequalities. With this in mind, we aim to realize an analysis of the public expenditure made by the Member States of the European Union in order to identify the main trends recorded in this sector.

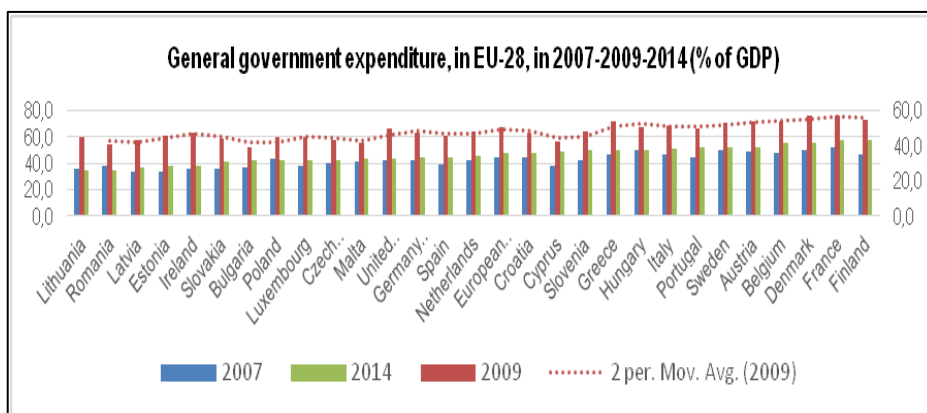
4.1. Analysis of public expenditure in the EU and in Romania

At EU level, the dimension of the public sector varies from country to country, depending on the availability of financial resources assigned and on the importance of the national policies promoted, while it can be assessed by means of public spending.

At the EU-28 level, the structure on functions of the overall spending average in GDP in 2014 is as follows: social protection (19.5%), health (7.2%), general public services (6.7%), education (4.9%), economic affairs (4.2%), public order and safety (1.8%), defence (1.3%), recreation, culture and religion (1%), environment protection and community amenities (under 1%).

Thus, an analysis of public spending relative as share in GDP in the period 2007-2014, shows that there is an increasing trend among Member States, from 44.9% to 48.2% (+3.3 p.p.) with differences from one country to another, as follows: a minimum of 34.8% in Lithuania and 34.9% in Romania and a maximum of 58.1% in Finland. It appears that these costs tend to be higher in developed countries, and it can also be noted that during the economic crisis (2009), all member countries have increased their share of these expenditure in GDP (Figure 1).

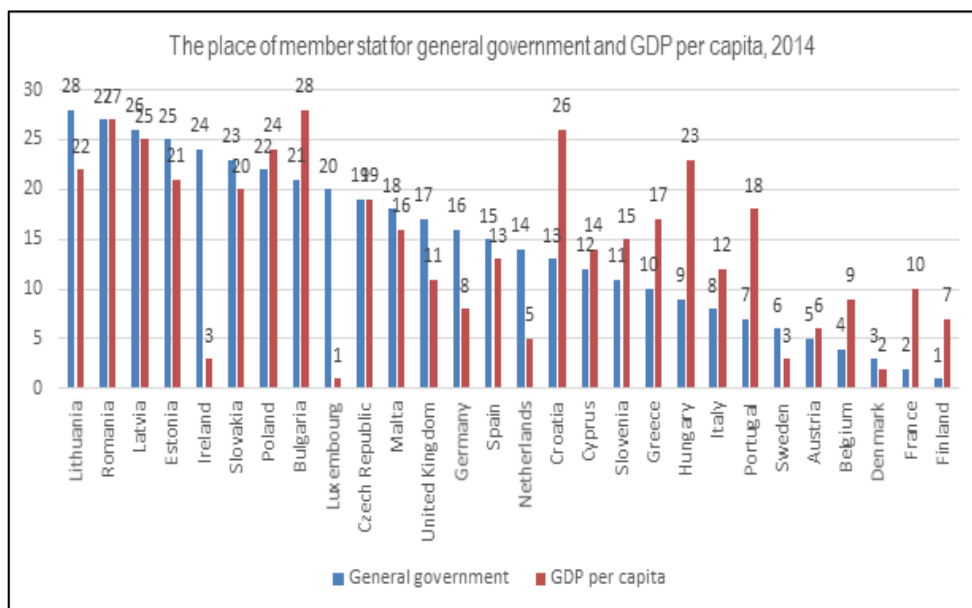
Figure 1: Expenditure of general government at EU-28 level, in 2014 (% of GDP)



Source: authors calculations based on Eurostat and Annex 1.

Based on the analysis of a ranking of general government expenditure and of GDP per capita, it can be seen that in the case of Finland, this holds the 1st place in case of GDP per capita but ranks seven in case of government general expenditure, and of France, which holds the 2nd place in case of general expenditure, but ranks 10 in GDP per capita. Romania ranks 27th in both indicators, the last place in case of expenditure being held by Lithuania (Figure 2).

Figure 2: GDP per capita and general government expenditure, in EU-28, 2014



Source: authors calculations based on Eurostat and Annex 1.

Another type of expenditure is that related to general public services¹. Here, the lowest figures are recorded in Latvia (4.9%), Estonia (4%) and Lithuania (4.6%), while maximum values are found in Hungary (10.2%) and Cyprus (18.8%). For two countries, Estonia and Lithuania, the share of public services has remained relatively constant

¹ For 'general public services', the groups are 'executive and legislative organs, financial and fiscal affairs, external affairs', 'foreign economic aid', 'general services', 'basic research', 'R&D General public services', 'general public services n.e.c.', 'public debt transactions', 'transfers of a general character between different levels of government'.

after 2007, with a slight increase. There are a number of countries that have decreased the weight of this expenditure in GDP: Greece, Bulgaria, Austria, Poland, France, Netherlands, Belgium.

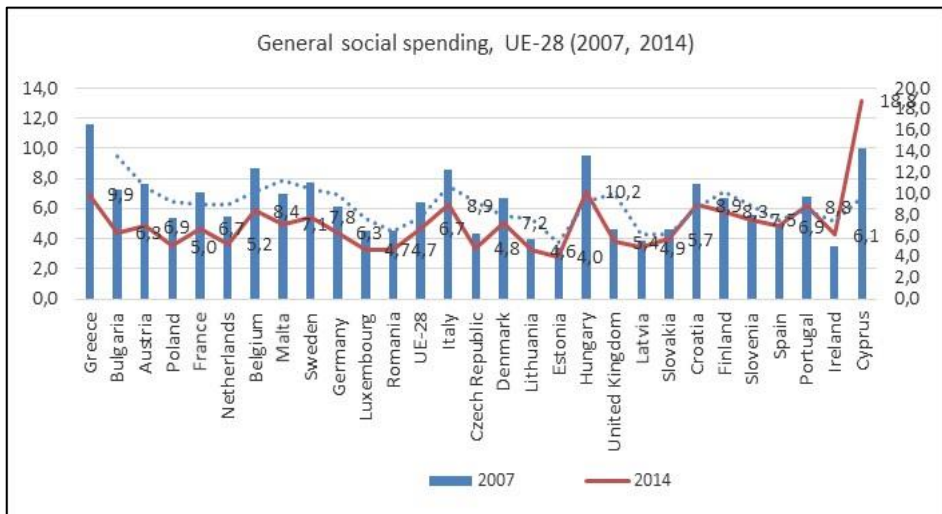
At EU-28 level, the expenditure on public services had a slight growth trend, from 6.4% to 6.7%; the countries that have increased the share being Spain, Portugal, Ireland and Cyprus (Table 2).

Table 2: Public services, 2014 (% of GDP)

Between 4-5	Estonia, Lithuania, Romania, Luxembourg, Czech Republic, Latvia
Between 5-7	Poland, Netherlands, United Kingdom, Slovakia, Ireland, Bulgaria, Germany, France, Spain, Austria
Between 7,1-7,9	Malta, Denmark, Slovenia, Sweden
Between 8-9	Finland, Belgium, Portugal, Croatia, Italy, Greece
Between 10-20	Hungary, Cyprus
Average of UE-28	6,7%

Source: authors calculations based on Eurostat and Annex 1.

Figure 3: General social spending, 2007 vs. 2014 (% of GDP)



Source: authors calculations based on Eurostat and Annex 1.

Regarding social protection expenditure, the European average reached 19.5% in 2014, with values between 11.4% and 25.4%. Romania ranks last (11.4% of GDP), followed by Estonia and Lithuania (11.5 and 11.8% of GDP for social protection). These values are below the EU average of 19.5% (2014). The largest expenditure on social protection is in Finland (25.4%), France (24.8%), Denmark (24.5%) and Austria (21.7%) (Table 3).

Table 3: Social protection, 2014 (% of GDP)

Between 11,5-13,5	Romania, Estonia, Cyprus, Czech Republic, Ireland, Bulgaria
Between 13,7-17	Malta, Hungary, Croatia, Poland, United Kingdom, Netherlands
Between 17,6-20	Spain, Slovenia, Portugal, Luxembourg, Germany, Belgium
Between 20-25,5	Slovakia, Greece, Sweden, Italy, Austria, Denmark, France, Finland
Average of EU-28	19,5%

Source: authors calculations based on Eurostat and Annex 1.

Always, *education expenditure* represented the core of national and Community policies, each individual Member States financing its own education system. The European Union projects Community policies destined for education projects, which meet the national ones, supporting common issues, such as the aging of population, skills shortages, technologies development and global competition (EU strategy, Education and training 2020). Community average value of this expenditure is 4.9% of GDP, with relatively large differences between one country to another, starting from a minimum of 3% in Romania, Bulgaria and Slovakia (4.1%) and to a highest value in Denmark (7.2%), Finland (6.4%), Belgium (6.3%) and Portugal (6.2%) (Table 4).

Table 4: Education, 2014 (% of GDP)

Between 3-5	Romania, Bulgaria, Spain, Italy, Slovakia, German, Ireland, Greece, Croatia
Between 5,1-5,5	Austria, Norway, Czech Republic, Luxembourg, Hungary, United Kingdom, Poland, Lithuania, Netherlands, France
Between 5,6-6	Estonia, Cyprus, Malta, Latvia, Slovenia
Between 6,1-8	Portugal, Belgium, Finland, Denmark, Sweden
Average of EU-28	4,9%

Source: authors calculations based on Eurostat and Annex 1

Another strategic field for the society and financed by the national public budget is *health*. At the EU-28 level, the *health* sector contributes to achieving the overall

objectives of the 2020 Strategy by *The EU Health Strategy "Together for Health"*, health being considered a precondition for economic prosperity and an important tool in reducing social exclusion.

In the Member States, the average share of budget spending destined for health is 7.2% of GDP, which is the second largest sector budget funded by national governments. Here, there are significant differences regarding the amount of funds allocated. The lowest values of spending relative to GDP are recorded in Slovakia (1.9%) and Cyprus (2.7%), while the maximum rates are in Denmark (8.7%), Finland (8.2%) France (8.1%), the Netherlands. Romania allocates to this sector 4.5% of GDP (2014) (Table 5).

Table 5: Health, 2014 (% of GDP)

Between 1,5-5	Slovakia, Cyprus, Latvia, Romania, Poland, Greece
Between 5,1-7	Luxembourg, Hungary, Estonia, Bulgaria, Lithuania, Malta, Spain, Portugal, Slovenia, Croatia
Between 7,1-8	Germany, Italy, Ireland, United Kingdom, Czech Republic, Austria
Between 8-9	Belgium, Netherlands, France, Finland, Denmark
Average of EU-28	7,2%

Source: authors calculations based on Eurostat and Annex 1

Another important objective of public administration is *the support and promotion of economic activities* by providing appropriate specific conditions. In EU-28, the general expenditure of the State for Economic Affairs Support reach 4.2% of GDP (2014), starting from a minimum of 2.8% in Cyprus and up to a maximum of 7.4% in Austria and Hungary, Belgium (7%) (Table 6).

Table 6: Economic affairs, 2014, (% of GDP)

Between 1- 3	Cyprus
Between 3,1-4,1	UK, Ireland, Germany, Denmark, Greece, Sweden
Between 4,2-5	Italy, Netherlands, Spain, Luxembourg, Slovakia, Poland, Estonia, Finland, Bulgaria
Between 5,1-6	France, Malta, Slovenia, Romania, Czech Republic
Between 6,1-7	Croatia, Portugal
After 7,1-7,5	Belgium, Hungary, Austria
Average of EU-28	4,2%

Source: authors calculations based on Eurostat and Annex 1

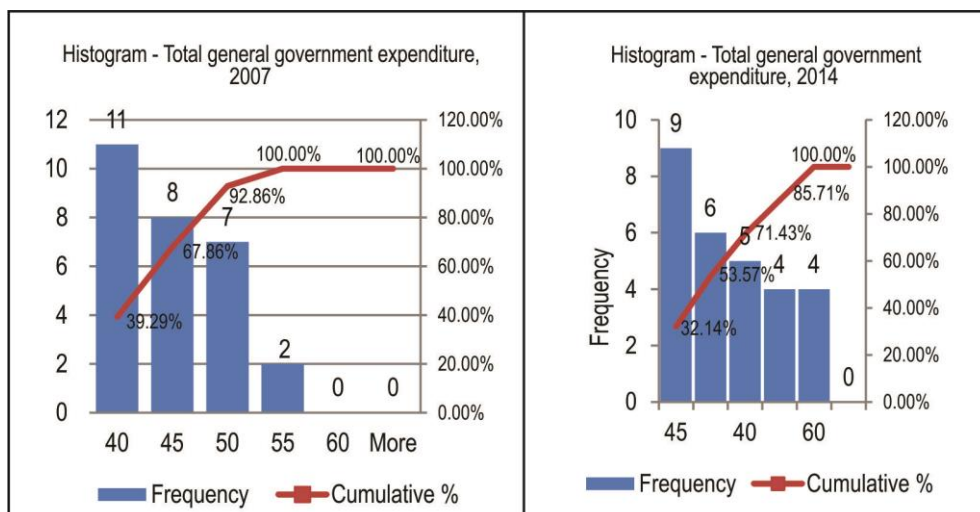
National defense expenditure is 1.3% of the GDP of the Member States, with differences ranging from 0.3% in Luxembourg and 2.7% in Greece. Romania allocates 0.8% of GDP (2014) to support this expenditure, down compared to 2007, when this share amounted to 1.8%, a trend that is recorded at the level of the average of EU-28 (decrease from 1.4% to 1.3%). The biggest defense expenditure is recorded in Greece (2.7%) and the UK (2.2%) (Annex 1).

To ensure public order, Member States allocate approximately 1.8% of GDP, with relatively small differences from one country to another, and with a relative consistency over time. Romania allocates 2.1% of GDP, a downward trend as compared to 2007 (2.4%) (Annex 1).

Two other publicly funded areas are: environmental protection and housing, the two reaching an average rate of 0.7-0.8% of GDP (Annex 1).

Briefly, the differences between Member States regarding how public resources are spent in the EU-28 are presented using the *Histogram*, which analyzes the distribution of frequencies for general government expenditure. Analysis of general government expenditure show a trend of decrease of differences recorded in public funding allocation (Annex 1).

Figure 4: Evolution of concentration in level of general government expenditure, 2007 and 2014



Source: authors calculations based on Eurostat and Annex 1.

5. The efficiency of public administration in Romania

5.1. Specific institutions of public administration

In Romania, public administration acts centrally by ministries and independent systems¹ and at local level by public local administration² based on the following principles: decentralization, local autonomy, deconcentration, eligibility, legality and consultation of citizens in solving local problems of great interest.

Ministries	Institutions under the Government
1. Ministry of FOREIGN AFFAIRS	1. The National Sanitary-Veterinary and Food Safety Authority
2. Ministry of EUROPEAN FUNDS	2. National Agency of Cadastre and Land Registration
3. Ministry of PUBLIC FINANCE	3. National Agency of Mineral Resources
4. Ministry of JUSTICE	4. National Commission of Hospital Accreditation
5. Ministry of NATIONAL DEFENCE	5. Insurance Supervisory Commission
6. Ministry of HOME AFFAIRS	6. Competition Council
7. Ministry OF REGIONAL DEVELOPMENT AND PUBLIC ADMINISTRATION	7. Department for Romanians Abroad
8. Ministry of LABOUR, FAMILY, SOCIAL PROTECTION AND ELDERLY	8. Department for Relations with Parliament
9. Ministry of ECONOMY	9. The institute for the Investigation of Communist Crimes and the Memory of Romanian Exile
10. Ministry of AGRICULTURE AND RURAL DEVELOPMENT	10. State Inspectorate for Construction
11. Ministry of TRANSPORT	11. National Office for Preventing and Combating Money Laundering
12. Ministry of NATIONAL EDUCATION	12. The Secretariat General of the Government.
13. Ministry of CULTURE	
14. Ministry of HEALTH	
15. The Ministry for INFORMATION SOCIETY	
16. Ministry of ENVIRONMENT AND CLIMATE CHANGE	
17. Ministry of YOUTH AND SPORTS	

Source: <http://www.administratie.ro/artspec.php?id=4>

¹ Law No. 215 of April 23, 2001, Local public administration law.

² Prefectures (representing the Government in the territory, with legislative role), county councils, local, city and communal and city halls as executive authorities aimed at applying locally the decisions adopted by prefectures or by central authorities.

The territorial-administrative structure of Romania is formed of 41 counties, including Bucharest Municipality (with district prerogatives), 2,861 communes, 217 cities and 103 municipalities. Communes, cities and municipalities have their own Local Council, which is headed by a mayor, elected in local elections held every four years (Table 7).

Table 7: Evolution of the number of administrative units in the period 1968-2015 (no, %)

		1968	1990	2015	2015/1968 (%)
Urban	Municipalities (no.)	47	56	103	119.15
	Cities (no.)	189	204	217	14.81
	Urban total (no.)	236	260	320	35.59
Rural	Communes (no.)	2561	2688	2861	11.71
	Villages (nr.)	12366	13088	12957	4.78
	Rural total – no.	14927	15776	15818	5.97
Total		15163	16036	16138	6.88
Population – total		19,720,984	23,206,720	19,870,647	0.76

Source: Own processing based on data from the Statistical Yearbook of Romania, 2015

After joining the EU, for the implementation of the cohesion policy and regional development, Romania has set eight *development regions* (economic or statistical regions that do not have an administrative status), according to NUTS-2 level from Eurostat, which are the basis of the implementation of economic development projects with regional impact.

The *Macroregion* is the fourth type of regional division, created in Romania, corresponding to level NUTS-1 of territorial statistical divisions in the EU-28 Member States. Romania's macroregions do not have an actual administrative status and its own form of government, being considered statistical regions. In Romania, there are four macro-regions: Macroregion 1 includes the North-West and Centre regions, Macroregion 2 - North-East and South-East regions, Macroregion 3 consists of developing regions South-Muntenia and Bucharest-Ifov, Macroregion 4 comprises the West and South West regions.

In 2014, the employees of public institutions were in a number of 981,801 people, representing 21.78 % of the total employed population. Structurally, most of the employed population is found in education (8.01% of total), human health (7.17% of total (Table 8).

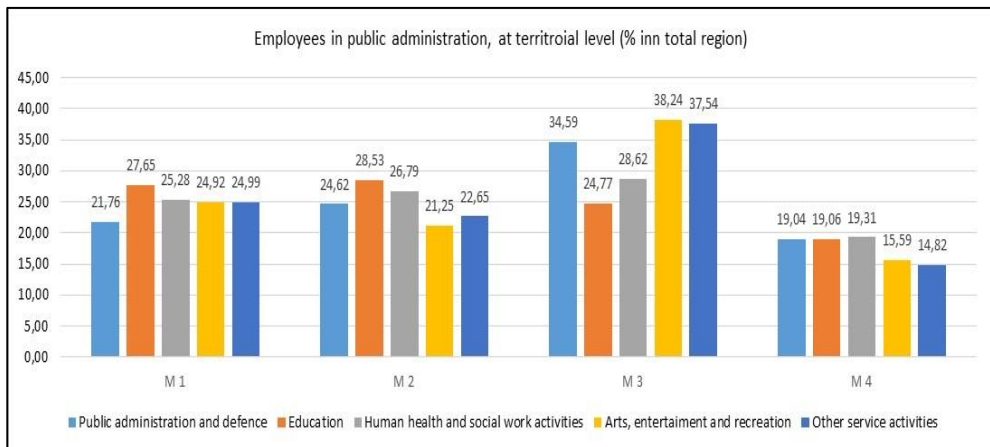
Table 8: Population employed in public administration, on Macroregions, in 2014 (thousand of people)

	TOTAL	M 1	M 2	M 3	M 4	% of public administration employees
Total employees (persons)	4507729	1194684	1003117	1463931	845997	
Public administration and defence	191898	41748	47249	66368	36533	4.26
Education	360844	99756	102935	89381	68772	8.01
Human health and social work activities	323080	81674	86550	92470	62386	7.17
Arts, entertainment and recreation	61829	15406	13141	23644	9638	1.37
Other service activities	44150	11032	10001	16575	6542	0.98
Total employees in public administration	981801	249616	259876	288438	183871	21.78
% of total	21,78	20,89	25,91	19,70	21,73	-

Source: Own processing based on data from the Statistical Yearbook of Romania, 2015

On sub-domains of public administration, the territorial profile differs depending on specific models, promoted as such: Macroregion 1 holds most of the population employed in Education (27.65%), Macroregion 3 in Arts (38.24%) and Macroregion 4 in Human health (19.31%) (Figure 5).

Figure 5: Regional employment in public administration, 2014 (% in total macro-regional)



Source: Own processing based on data from the Statistical Yearbook of Romania, 2015.

5.2. Public sector efficiency evaluation in Romania

The analysis of how public administration allocates financial resources can contribute both to explaining certain economic and social policy developments and to establishing development prospects in the medium and long term. Efficiency of public spending is assessed annually, both nationally and internationally, using global indices that take into account the quality of the institutional environment (public administration), but also important economic indicators.

The International Global Forum issues annually the Global Competitiveness Report, which assesses the reforms, made to improve productivity and efficiency of public spending. The 2015-2016 Report shows that globally, the economic growth remains low and unemployment persistently high and the consequences of the crisis are being felt yet worldwide. The recovery was less robust than was planned, while economic growth was reduced in the context of geopolitical shocks, which had a negative impact on the sustainability of development.

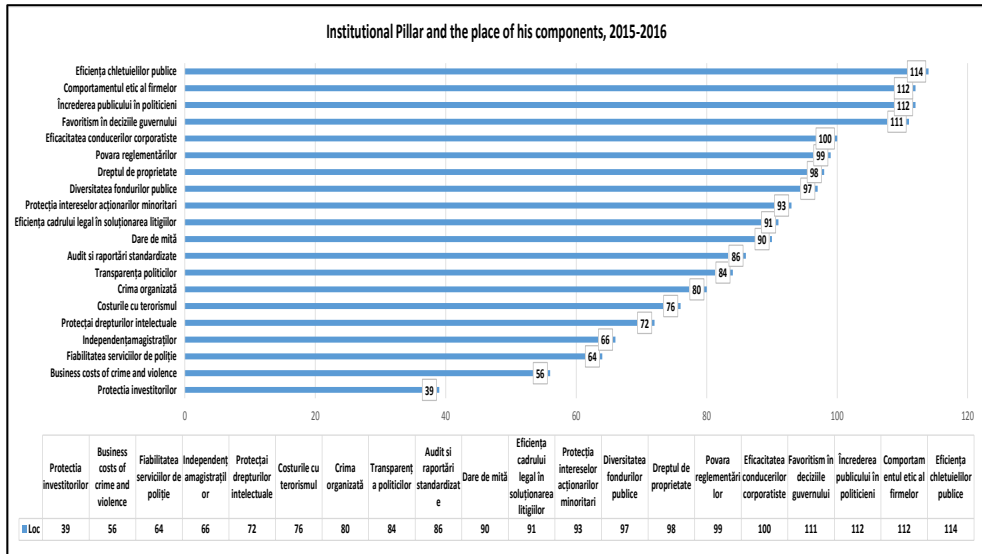
Global Competitiveness Index of the Report mentioned above ranked Romania on the 53rd place (2015) from a total of 140 countries for which such assessments are made. Compared with 2014, Romania advances six places (59th) (in previous years, 2013 and 2012, as the places occupied were 76 or 78, showing an improvement of the global competitiveness of the country).

The Global index is based on four Pillars: *Quality of Institutions, Infrastructure, Macroeconomic Environment, Primary Education and Health*. The performed assessments place Romania in World rankings (140 countries), as follows: Place 86 in Pillar 1 - The Quality of *Institutions*; Place 86 in Pillar 2 - *Infrastructure*, Place 34 in *Macroeconomic Environment Pillar*; Place 83 in case of Pillar 4 - *Primary education and health*.

Regarding Pillar 1 - Institutions – global assessment shows that Romania ranks 39 for component *Protection of investors*, 112 in *Ethical conduct of companies*, 112 in *Public trust in politicians*, 111 in *Favouritism in government decisions* and 99 in *Burden of regulations*. The last place (114 of 140) is held by *Public spending efficiency*.

The Report states that both economic problems and the increase in consumption and political uncertainty, results in increases in income inequality. A practical way of increasing the quality of life is based on accelerating the collaboration between the public and private sectors, through better information of stakeholders by adopting the *Corporate Social Innovation* practiced by the private sector (Figure 6).

Figure 6: Place occupied by Institutional Pillar components



Source: <http://reports.weforum.org/global-competitiveness-report-2015-2016/competitiveness-rankings/>

Using the methodology proposed by OECD, we will further analyze further the efficiency of public administration in Romania; resume the results achieved and the resources used by analyzing relevant indicators for each item.

A. Administration:

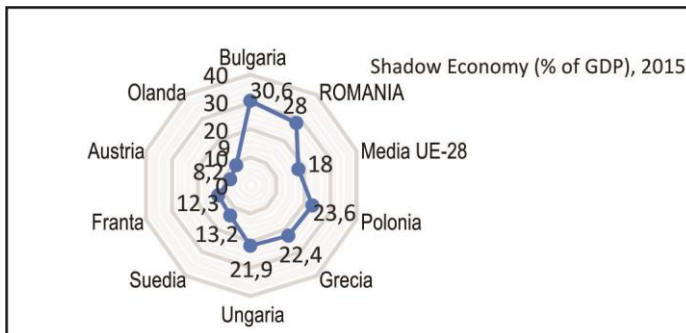
To assess the overall results of the public administration in Romania we draw attention to the size of the underground economy (shadow economy). It is estimated using the econometric procedure MIMIC - Multiple Indicators and Multiple Courses¹.

The size of the underground economy is assessed by reference to GDP. At EU-28 level, the underground economy is experiencing a decrease from 22.6% (2003) to 19.6% in 2008 after increasing in 2009 to 20.1% and decreasing again to 18.3% (2015). Romania occupies the last but one place, with a share of shadow economy in GDP of 28%. In period 2003 - 2015, Romania's underground economy has recorded a decline in the

¹ Author, Professor Friedrich Schneider in *Handbook on the Shadow Economy*, Cheltenham, Edward Elgar Publishing Company, 2011. Also, Friedrich Schneider, Colin C. Williams, in *The Shadow Economy*, The Institute of Economic Affairs, (IEA, London, 2013).

share of GDP from 33.6% in 2003 to 28% in 2015, a trend that was registered in most Member States. It is considered that the most important reason of this decrease is that, while the official economy is recovering or expanding, people are less interested to undertake additional activities in the shadow economy, to earn extra money on the "black" market (Figure 7).

Figure 7: Shadow economy



Source: author compilation on Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2015: Different Developments.

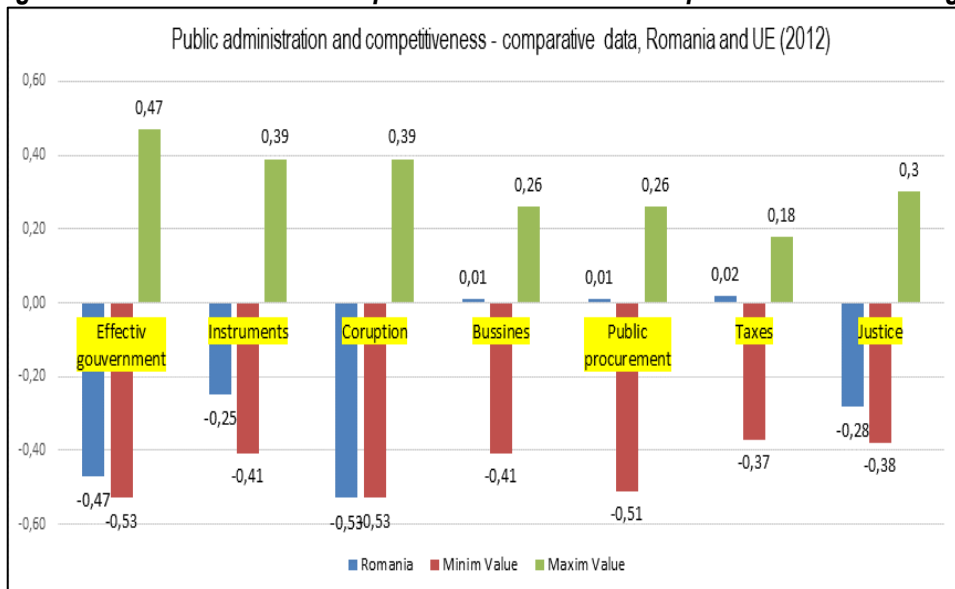
- B. Education:** In terms of education, we will analyze as basic indicators of: (a) *Public expenditure on education as percentage of GDP* - Romania holds the last place in the EU with only 2.70% of GDP for the education sector, an increase as compared 2012, when it recorded the value of 2.64%. Average of EU-28 is of 5.34% (2013), an increase compared to 2012 (5.18% of GDP). (b) *Number of students in public education* - Romania has a rate of 2.01% of the number of students registered in public education, under the EU-28 average of 2.71%.
- C. Health:** *Infant mortality rate* in Romania was 8.4 per 1,000 inhabitants, above the EU-28 average, which is 3.7 per 1,000 inhabitants. (2014). Romania has the highest infant mortality rate in the EU-28, along with Bulgaria, which recorded an indicator value of 7.6 per 1,000 inhabitants.
- D. Standard of living:** a relevant indicator by which the standard of living can be analyzed - a central element of public policy - is the *Poverty rate*. Its value was of 39.5% (2015), a decrease compared to 2007 when the value reached 54.5%. Countries placed at the end of the ranking are Greece (40.7%) and Bulgaria (49.1%) far below the EU-28 average, 16.9% (2015).

An overall evaluation of the efficiency of public administration in Romania is presented in *Reindustrialising Europe – Member States' Competitiveness Report 2014*. According to this report, the modernization of public administration should be one of the key priorities of each Member State in part because its inefficiency, together with the reduced legal capacity and an improper / unsafe legislation are elements that negatively affect the competitiveness and economic growth. According to the Report, Romania has the lowest performance index value compared to that of Member States, proposing an intense process to streamline public administration for the current programming period (2014-2020). Romania also occupies the last but one place in e-government services and in various business processes for companies (several administrative procedures which cannot be filled in online). Corruption remains, however, the most important obstacle to the development of business in Romania.

Another report of the European Commission aims at evaluating the efficiency of public administration through the *overall performance, through the degree of modernization of instruments used, through the level of corruption, through the public procurement procedures, through taxes, justice and starting a business*.

Figure 8 presents the average, minimum and maximum values of these indices, calculated at EU level. As can be seen, Romania is placed close to the minimum value in case of all the analyzed indicators.

Figure 8: Global assessment of public administration compared to the EU average



Source: Eurostat Data.

Possible causes that led to the situation shown in Figure 10 are: limitations in implementing a modern human resource management based on the decentralization of power and responsibility, limited availability of doing business, licenses, business start etc. Obtaining licenses in Romania is considerably more complex than in the EU, the time required to start a business is equivalent to the EU average, the corresponding costs being lower (3% of income per capita), while public procurement is an issue that should be solved in the current programming period. Romania existing administrative fees are above the EU average, while in case of efficiency of civil justice, the performances are below the EU average.

The efficiency of the public sector is given by its ability to innovate (Eurobarometer) the following levels being equally important: the quality of the staff employed, of the services provided and the infrastructure used, all resulting in obtaining quantifiable benefits, on sub-specific areas (public administration, health, education, public policy).

Application of innovation in public administration determines the increase of the value of goods and services provided to population and businesses ("Creating Public Value"). Of the branches of the public sector, the most innovative one is considered local public administration. Among the examples of innovation in the public sector we can include: improving access to information on public services, the possibility of filling the forms online etc.

Public sector innovation requires a sustained process of computerization, optimization of working processes through innovative technologies, which can contribute to economic growth in the short term (by reducing costs and streamlining the business) and in the long term (rising the living standards).

5.3. The financing of public administration from EU funds

In Romania, public administration has a "low capacity of strategic and financial planning, an inadequate allocation of financial resources, it has no efficiency in policy implementation and service provision, it does not cooperate sufficiently and there is no coordination between different levels of government, presents weak management and control systems, a lack of integrated management of public services for business environment and citizens, and there is no strategic and effective management of human resources "(European Commission).

At the level of the European Union, Structural and Investment Funds devote a thematic objective for investigating and supporting the quality and capacity of public authorities in the Member States, the financial resources allocated for the current programming period (2014-2020) reaching around 4.7 billion Euro.

An important tool of the current programming period that can support the modernization of public administration in Romania is the Operational Programme - Administrative Capacity (PO-AC), the objective of which is to facilitate the social economic development through competitive public services, investment and quality regulations, thereby contributing to the fulfilment of the objectives of *Europe 2020*. The program's main objective is the achievement of a *modern public administration, able to facilitate the socio-economic development through competitive public services, investment and quality regulations, contributing thus achieving the objectives of Europe 2020*. The projects funded through the OP-AC can support the development and introduction of common systems and standards in public administration, in order to optimize decision processes. OPAC 2014-2020 addresses all eight development regions of Romania. Within the Program the following types of beneficiaries will be able to obtain financing: public central authorities and institutions, autonomous administrative authorities, NGOs, social partners, accredited higher education and research institutions, the Romanian Academy, local authorities and public institutions at county and municipalities level, local authorities and public institutions benefiting from ITI, justice institutions.

The financial allocation of the European Social Fund program for 2014-2020 is of 553.19 million Euro. OP-AC 2014-2020 budget is structured on three priority axes, as follows:

- Efficient public administration and judicial system, with a financial allocation of 326.38 million Euro (59%);
- Accessible and transparent public administration and judicial system, with a financial allocation of 187.69 million (33.93%) ESF;
- Technical assistance, with a financial allocation of 39.11 million Euro (7.07%).

OP-AC financial allocation is done differently among regions, taking account of the place of development: 79% for less developed regions and 21% for the more developed ones.

Optimization public administration structures represents an important condition for the implementation of any structural change towards a smart, sustainable and inclusive growth in support of *Europe 2020*. Among the actions set in OP-AC designed to improve the quality of public administration in Romania, we can mention:

1. the strengthening of public administration capacity, particularly by improving efficiency, human resources management, decision-making tools and coordination within and between various administrative levels and by improving transparency, integrity and accountability;

2. accelerating the absorption of EU funds, strengthening management and control systems, improving the strategic planning capacity, including the multi-annual budget;
3. remedying the persistent weaknesses in public procurement sector;
4. improving the quality and efficiency of the judiciary system, fighting corruption at all levels and effective enforcement of court decisions.

6. Conclusions

In the theory of public economics, public administration compensates for the shortcomings of the competitive market by creating an institutional and legal framework favourable for the business environment, for the increase of the functionality of the market economy, supporting good governance. The specific objectives are set taking into account its main functions: providing a sustainable and functional health system, a defense system corresponding to national public policies, a transparent system of justice, an adequate infrastructure, a system to support the economic environment ensuring sustainable development, etc.

The public administration - competitiveness relation is multi-dimensional and complex. A real impact on this relationship is played by the public administration expenditure and quality of public institutions. Thus, the conclusion is that overall public spending relative to GDP is higher in countries with a high level of development, as compared to the least developed countries, which are less preoccupied, while less developed countries allocate funds insufficient to improve a fair and balanced standard of living. The ineffectiveness of public institutions generates corruption and the presence of shadow economy, but also poverty and underdevelopment. Countries with an inefficient public sector must take measures and actions which can reform it (eg. by introducing competition in the provision of services, by leasing infrastructure development, partial privatization, allocation of increased funds for education, health etc.).

In Romania, the public administration has a relatively low performance: holding the first places in shadow economy, infant mortality and poverty rates, these indicators being correlated directly with the efficiency of the implemented policies. To this, we can also add the negative perception that citizens have on the quality of public institutions, on the services offered and generally, on the public policy and political factor. Moreover, the tools currently used by the public administration in Romania do not support a high added value of public services and goods, increasing the level of bureaucracy and corruption. It is therefore necessary to improve all components of the public sector so that its institutions can fully, support national and regional competitiveness, and

economic growth as a whole. Also, modernization of the public sector must provide opportunities for innovative information and information technology, which would lead to acceleration of strategic performance and increased efficiency.

In the current programming period, Romania now has 553.19 million Euro from the European Social Fund, financial resources allocated through Operation Programme - Administrative Capacity for the reform and modernization of public administration, through competitive public services, through integrated and efficient investment and quality regulations, which will lead to economic and social development and to the fulfilment of Europe 2020 Strategy objectives.

The main actions that will contribute to the modernization of public administration in Romania mainly aim at two strategic issues:

1. improving the management of public services;
2. improving human resources management.

Actions that aim at *Public services management* improvement:

- ✓ improving the efficiency and accessibility of public services by achieving quality standards;
- ✓ standardization of costs and quality of public services;
- ✓ developing distinct and coherent rules and regulations;
- ✓ promoting efficient tools for management, monitoring, evaluation and control of public services;
- ✓ using ICT systems and tools;
- ✓ improving public procurement legislation, which has serious deficiencies, it is excessively complex, with a faulty system for monitoring and managing of public procurement;
- ✓ strengthening the administrative capacity of local public authority in order to effectively manage local budgets, strategic planning, and identifying new sources generating own additional revenue.

Actions to improve *Human resources management*:

1. monitoring and differentiated evaluation on categories of staff;
2. substantiating the need for staff on the basis of priorities and specific objectives through an adequate information system and using data;
3. techniques and performance-oriented procedural methods;
4. implementating an efficient plan of professional training of civil servants at central and local level;

5. implementing the principles of performance management in the processes of recruitment, evaluation, promotion, motivation and professional development of human resources in public administration.

In conclusion, a modern public administration will be able to support the development of Romania in the long term through efficient and effective public services, through integrated investment and quality regulations that will ultimately ensure welfare and economic and social performance.

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