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## **MEASURING PERFORMANCE IN THE PUBLIC SECTOR: BETWEEN NECESSITY AND DIFFICULTY**

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**MIHAIU Diana**

*Lucian Blaga University of Sibiu, Romania*

**Abstract:**

*Performance measurement (PM) in the public sector is indeed a necessity. PM has been introduced in many public organizations in order to ensure transparency of public decisions and the use of public funds and to boost performance. But in practice, this concept strikes many obstacles: defining performance in the public sector, identifying suitable performance indicators, implementation of a performance management system. A challenge, still present, is to identify the most suitable methods for monitoring and measuring performance, so do not give rise to speculative behavior among employees and managers. This paper presents the methods used in measuring performance in the public sector, as well as some drawbacks generated by these methods. The perverse effects of performance measurement in the public sector can take different forms, but their knowledge is useful in building an optimal system for managing and measuring the performance.*

**Key words:** *performance measurement, public sector, efficiency.*

### **1. Introduction – the need for defining and measuring performance in the public sector**

The performance analysis in the public sector is a matter of real importance for national governments and public policy-makers who are currently experiencing a high volume of public debt as a result of crossing the period of financial crisis. This public debt issue is not only present, but also covers a longer time horizon given the debt burden caused by the public duty accumulated on the future public budgets and on future generations. It is therefore a good time to be aware of the necessity to give value for money and to effectively implement performance on all levels of the public sector and to eradicate the cases of speculative performance and achieve sustainable performance. Limited budgets and the needs of the citizens put governments under pressure and lead them to realize the necessity of giving value for money. Providing information on the performance of the public sector the public's need to know is satisfied and can also be a useful tool for governments in order to assess their own achievements.

Measuring the public's sector performance has lately become an increasingly important topic. In moments of increasing the pressure over the public expenditure, which arise from demographic trends and globalization, improving efficiency, effectiveness and performance should be a priority for any political agenda. Intensive orientation to improve performance in the public sector aims to reduce the tax burden, increase public confidence in the government and increasing the overall productivity.

Most studies regarding the public sector performance address **the problem of defining and measuring** it by external stakeholders. Defining performance in the public sector is however a difficult task which derives from the complex role of the public sector. One way to define performance in the public sector a requires the existence of a relationship between objectives, means and results, so performance *is the result of the simultaneous exertion of efficiency, effectiveness and of a proper budgeting* (Profiroiu M, 2001, pg.8).

Performance in the public sector describes the results of an activity in a specific area or aggregate results from several or all activity fields of a public body, being measured either in absolute terms (as an index) or in relation to the results achieved in the previous periods (H. Handler, B. Koebel, P. Reiss, M. Schratzenstaller, 2004). In the paper "*The analysis framework of the public sector performances*", Profiroiu Marius and Alina Profiroiu have illustrated, from a theoretical point of view possible methods for measuring the performance of a public organizations, namely: a) *measuring the economy of resources*; b) *measuring the costs (input)*; c) *measuring outputs*; d) *measuring the effects (outcomes)*; e) *measuring efficiency*; f) *measuring effectiveness*; g) *measuring the quality of services*.

Measuring the performance in the public sector hits some obstacles when put in practice: the multidimensional nature of the objectives whose fulfillment level must be measured; the necessary information (Cai Zhonghua, Wang Ye, 2012). The performance measurement system is defined as a system that allows making some decisions and implementing some fundamental actions because it is based on quantifying the efficiency and effectiveness of past actions using appropriate information infrastructure (A. Neely, C. Adams, M. Kennerley, 2002).

Current systems for measuring performance in the public sector present some limitations because they are based only on efficiency, effectiveness and economy indicators, which are mainly financial that fail to measure the fulfillment of environmental and social objectives of the public organizations. A solution for this is the transition from the system of the "3 E's" (effectiveness, efficiency, economy) to a system of the "5 E's": Economy, Efficiency, Effectiveness, Environmental and Equity (see the work of Nan Chai, *Sustainability Performance Evaluation System in Government*, 2009).

The construction of some performance indicators in the public sector is a difficult task because not all goals are measurable, so it is often resorted to benchmarking analyzes. Establishing the performance of a public organization can be a difficult task, caused by the **difficulties** that exist in defining performance: *the first difficulty arises from the meaning of the concept of performance; the second from the*

*method of obtaining the performances and the third from the performance evaluation.* The difficulty of objectively measuring performance in the public sector is driven by the complexity and multidimensional nature of the concept (George A. Boyne, Kenneth J. Meier, Laurence J. O'Toole Jr. and Richard M. Walker, 2006).

Measuring the performance in the public sector must take into account the efficiency, effectiveness, economy, financial performance, quality of service, the fulfillment of social and environmental requirements, so there cannot be build a single model that would measure the performance at the level of the public organizations. Newcomer K. E. also presented some problems which may represent obstacles in implementing a system of performance measurement in the public sector, namely: *communication* difficulties, the lack of a *necessary analytical skill* of the people involved, the lack of *skills* designed to operate with methods the influence of the *political factor* (Newcomer K., 2003).

A. Stefanescu, D. Calu, Turlea E., Nicolae F. have identified the following causes of the difficulties of defining and measuring performance in the public sector: *typology of public sector entities; diversity of perception of performance; informational asymmetry of the users of information concerning performance; nature of the offered public service; complexity of the economico-social environment; ascendent trend of consumers; discrepancy between the number of consumers and the one of contributors towards the establishment of public resources; managers' low interest for identifying new financing sources; real non-existence of the correlation financial performance – non-financial performance, respectively the influence of the political system* (A. Stefanescu, D. Calu, Turlea E., Nicolae F., 2010).

In addition to these difficulties, I believe that Romania faces other, related to: *high corruption* at the level of decision makers, the lack of an *organizational culture* in the public institutions aimed at achieving performance, *lack of transparency* in public decision-making, *high bureaucracy*.

**Table 1: Difficulties in measuring the performance in the public sector**

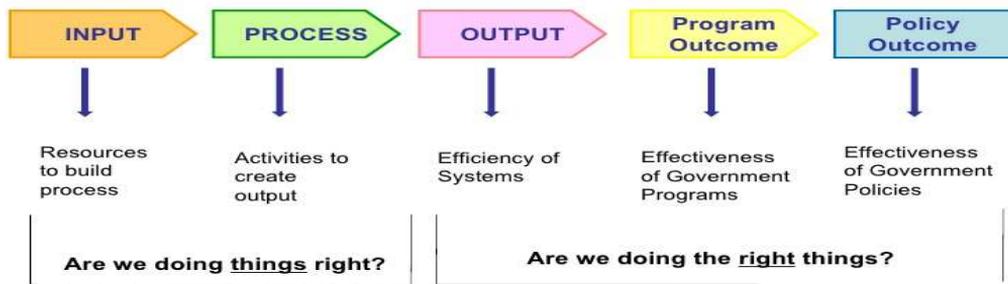
- defining objectives for missions with complex nature (in particular, handling multiple and conflicting objectives).
- the lack of relevant and measurable objectives in terms of final product, of quality and efficacy.
- the absence of a correlation between the overall objectives with specific targets and objectives, which diminishes their value as management tool or in program evaluation.
- the relative inexperience of officials regarding the development and use of performance measures.
- the lack of competence in the accountant staff who received traditional training.
- the absence of interest of the politic users and of policies and of senior officials.
- the lack of resources for building the necessary information systems.
- the resistance of the staff and unions in accounting work time.
- the cost of measuring performance; and
- the complexity of work consisting in fast and efficient integrating and synthesizing numerous data sources.

Source: *Performance Management in administration: performance measurement and results-based management, OECD Work on Public Management 3/1994, Romanian Edition Babes Bolyai University, 1999, page 35.*

Even if a generally valid definition of the performance in the public sector cannot be shaped, some general features can be drawn, namely: a performance measurement system involves a relationship between inputs, process, outputs and outcomes and should be guided by the following objectives: are we doing the things right and are we doing the right things? (see figure 1). If initially the performance measurement was based on the results obtained, current theories have introduced the need to introduce inputs, process indicators used in obtaining the results and the outcomes indicators, namely the effects generated by results, creating a comprehensive performance measurement system.

Figure 1: Measuring the performance in the public sector

**COMPONENTS OF PERFORMANCE MEASUREMENT**



Source: Measuring performance of the public sector - problems and approaches available online at <http://www.slideshare.net/miniverma1/measuring-performance-of-the-public-sectorproblems-and-approaches>

In Romania, the public sector performance studies are still at an early stage and applying the concept of performance in practice is almost nonexistent. Also, currently in Romania there is no system for measuring the performance in the public area and no implementation and monitoring process either. In many countries in the world measuring the public sector performance has become a practice adopted by law, such as the U.S., Canada, UK, Australia, New Zealand, and Netherlands. China began introducing a performance management system since the 80s, which has been improved over the years. Therefore, the objective of the paper is to identify the current methods of measuring the performance of the public sector at international level and to contribute, by providing practical and original solutions to improving practices in the public sector performance in Romania.

## **2. Current performance evaluation systems in the public sector**

Tools for studying the performance in the public sector are differentiated on two levels:

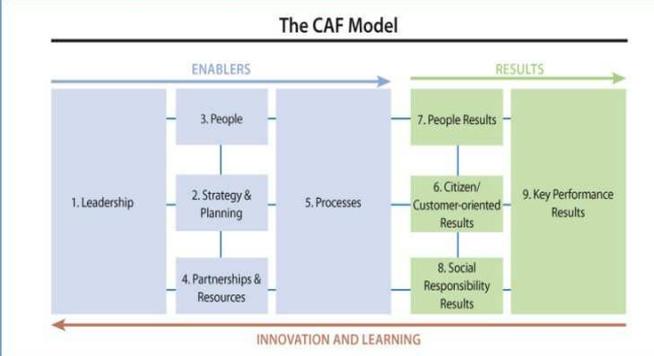
- Management and measuring tools of the performance of the public organizations;
- Instruments for measuring the overall performance of a country's public sector.

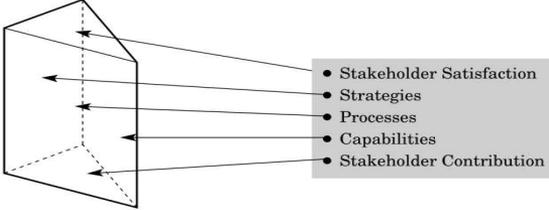
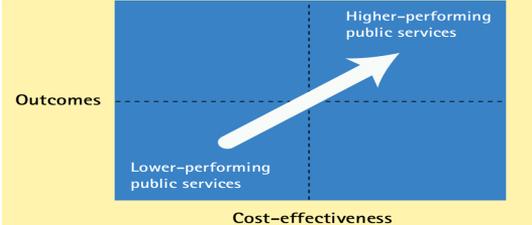
Performance measurement (PM) has been introduced in many public organizations in order to ensure transparency of public decisions and the use of public funds and to boost performance. But often, such performance measurement practices give rise to speculative behaviors and generate perverse effects (Hans de Bruijn, 2002).

The performance measurement models fall into two main categories:

- *One-dimensional models* that measure performance through indicators of financial nature. Such models involve calculating certain financial indicators based on the information in the financial statements. These models manage, in the best case, to capture only aspects of financial performance. But the public organization should not be confused with a private one; the public organization's objectives are not only economic, but of social priority. Therefore, measuring the performance of a public organization based only on indicators of financial nature can become a dangerous practice that could harm obtaining the actual performance in accordance with the mission of the public organization concerned. Public managers will develop speculative behaviors and will guide their decisions by financial indicators that must be reported, to the detriment of the social mission.
- *Multidimensional models*, which come in addition to those previously described by introducing nonfinancial indicators along with the financial ones. These models are an undeniable improvement in the performance measurement practices because they limit the opportunities for speculation and try to ensure measuring the performance based on the objectives of the public organization. It is not being tried to discredit the role of the financial indicators. These have a major importance in the public organizations that have limited financial resources, but must be completed and correlated with the nonfinancial indicators in order to catch all the dimensions of the performance.

Table 2: Models for measuring the public sector's performance

ONE-DIMENSIONAL MODELS	MULTIDIMENSIONAL MODELS	
<p>Net surplus of the period</p>	<p><b>Total Quality Management (TQM) in Public Sector</b></p>	<p>The concept was adopted in the public sector in 1980 and aims to achieve two objectives: improving public services and increasing the performance through efficiency and effectiveness (Comaniciu Carmen, Bunescu Liliana, 2012).</p> <p>An instrument of the TQM in the public sector is Common Assessment Framework (CAF), "model based on the premise that excellent results in organisational performance, citizens/customers, people and society are achieved through leadership driving strategy and planning, people, partnerships, resources and processes" (European Institute of Public Administration).</p> <p><b>Figure 2: The Common Assessment Framework Model</b></p>  <p>Source: European Institute of Public Administration (EIPA), Common Assessment Framework <a href="http://www.eipa.eu/en/topic/show/&amp;tid=191">http://www.eipa.eu/en/topic/show/&amp;tid=191</a></p>
	<p><b>Performance pyramid</b></p>	<p>Performance Pyramid Model (also known as SMART - The Strategic Measurement and Reporting Technique) was introduced by Lynch and Cross in early '90s.</p> <p>The model recognizes the importance of the influential internal and external factors of the performance and allows the construction of a performance monitoring system in cascade, starting with the vision / mission of the organization, using both financial and non-financial indicators.</p> <p><b>Figure 3: The Performance Pyramid</b></p>  <p>Source: <a href="http://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/The%20Performance%20Pyramid.aspx?mode=none">http://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/The%20Performance%20Pyramid.aspx?mode=none</a></p>

<p><b>Financial cost benefit indicators</b></p>	<p><b>Balanced Scorecard for public sector</b></p>	<p>It is a planning and management system developed by Robert Kaplan and David Norton in the 90s oriented towards obtaining and measuring the performance of the organization. Balanced scorecard allows monitoring public organization performance from these four perspectives (Howard Rohm, 2002):</p> <ul style="list-style-type: none"> <li>- Customers and stakeholders perspective</li> <li>- Financial perspective</li> <li>- Internal business processes perspective</li> <li>- Employees and organization capacity perspective.</li> </ul>
<p><b>Net economic present value</b></p>	<p><b>Performance Prism</b></p>	<p>Developed by Andy Neely, Chris Adams and Mike Kennerley in the year 2000. This performance measurement framework has the following advantages over the previous systems: takes into consideration a wide range of stakeholders of the organization; treats differently the stakeholder's satisfaction and contribution in the organization; allows a performance analysis from an internal and external perspective.</p> <p>Performance Prism proposes the following dimensions for a system of measuring performance (Andy Neely, Chris Adams and Mike Kennerley, 2002):</p> <p style="text-align: center;"><b>Figure 4: Performance Prism dimensions</b></p>  <p style="text-align: center;"><i>Source: Andy Neely, Chris Adams and Mike Kennerley, (2002), The Performance Prism. The Scorecard for Measuring and Managing Business Success, Financial Times Prentice Hall an imprint of Pearson Education, page xi.</i></p>
	<p><b>Benchmarking</b></p>	<p>It is a tool that allows measuring performance in the public sector by making reference to a standard or compared to best practices. Thus it allows identifying the main deficiencies and measures that must be implemented. Benchmarking studies are widely used in the public sector due to the multiple dimensions of performance.</p>
	<p><b>Public service value model (PSV)</b></p>	<p>It is a model that analyzes the process of creating value in the public sector in terms of two categories of indicators: outcomes and cost-effectiveness indicators.</p> <p style="text-align: center;"><b>Figure 5: Quadrants of public service value model</b></p>  <p style="text-align: center;"><i>Source: Vivienne Jupp, Mark P. Younger, (2004), A value model for the public sector available online at <a href="http://www.accenture.com/SiteCollectionDocuments/PDF/hp_gov.pdf">http://www.accenture.com/SiteCollectionDocuments/PDF/hp_gov.pdf</a></i></p>

### 3. Speculative approaches generated by the current performance measurement systems in the public sector

The need for performance monitoring in the public sector is undeniable. The problem arises in choosing the most suitable systems for implementing the concept of performance in the organization and in the construction of optimal methods for its measurement in order to avoid or minimize cases of obtaining false performance, meaning getting scripted performance (presented only in reports). The studies in this direction, of the consequences of introducing a performance measurement model in an organization have started to be more numerous with the adoption of the New Public Management (NPM) and with the diversification of the performance measurement models focused on getting the performance and on outcomes.

The perverse effects of performance measurement in the public sector can take different forms, but their knowledge is useful in building an optimal system for managing and measuring the performance.

According to Hans de Bruijn, the perverse effects of the PM are (Hans de Bruijn, 2007, adapted after pages 17-33):

- *generates strategic behavior of the employees* who will be more interested in achieving the related performance indicators in order to benefit from any financial incentives or to get a high score on the annual assessment rather than the overall fulfillment of the objectives of the organization. The employees will operate the easiest activities that will generate the measured results by the performance indicators resulting in a degradation of the professional activities. For example, if a tax inspector performance will be determined according to the number of fines and of checks applied, then the inspectors will be tempted to carry out controls on small taxpayers rather on the big state taxpayers, without being guided by the size of the potential tax evasion. This effect is also known as "tunnel vision" (van Thiel, Leeuw, 2002, pg.269).
- *focuses on outputs, not on how to obtain them, and thus does not stimulate the creation of innovative ideas.* Employees will focus on getting the results monitored and will not be stimulated to produce other innovative results and new performances which are not part of the PM system. For example, the imposition of fulfilling an annual score by researchers will discourage them in conducting extensive, innovative research that take place in a time horizon longer than 1 year. This effect is known as "organizational paralysis" (van Thiel, Leeuw, 2002, pg.269).
- *can generate the effect of "creaming",* meaning strategically selecting the inputs so as to obtain the required results with minimal effort.
- *may actually mask the true performance of the public organization,* misleading the external stakeholders. In some cases the reported figures are not conclusive to objectively assess their activity.
- *may cause a degradation of the quality of services offered* (if the costs are tracked) and can create more bureaucracy.

- *may contribute to the degeneration of inter and intra - organizational relationships* in sharing the best practices.
- *PM, mainly achieved through benchmarking, stimulates copying the practices, and not their innovation*, which is risky for organizations that automatically transpose such practices because the results obtained will not necessarily be favorable.

Implementing a system of PM in the public organizations can generate some unintended negative consequences, such as: increasing the public expenditure allocated to the performance audit activities; designation of some public organizations, unjustly, on a higher rank due to the performance indicators reported but which contain errors from design or are too few and the attraction of these organizations of increased public funds (van Thiel, Leeuw, 2002, pg. 270-271).

The identified causes of the apparition of the adverse effects of PM: a performance measurement system generates indicators, and these indicators do not convey the reality behind them, how they were made by employees of public organization; in general, the PM systems are static and allow a speculative adaptation to the requirements asked contributing to the degradation of the professional activity of the employees; most PM systems from the public sector are designed and imposed by the organization's external political factors that are not fully aware of the specific of the activities which generate opposition from employees; financing the organization depends solely on the results of the PM system indicators, without analyzing the process of achieving them (Hans de Bruijn, 2007, pg.29-33); if the manager of the public organization does not realize that only fulfilling certain financial performance indicators can harm the quality of the public services, then he will not invest much effort in implementing a wide PM system (Sven Modell, 2004, pg.45), using a very reduced number of performance indicators.

Also, the unwanted effects of PM appear because of the failure to clearly define the objectives of the public organizations; the lack of correlation between the established performance indicators with the mission, the objectives and strategies of public bodies, for example the mission of the National Agency for Fiscal Administration (NAFA) is to collect and manage effective and efficient taxes, social contributions and other amounts owed to the general consolidated budget for providing the necessary resources to finance public spending (The NAFA strategy 2013-2017). In 2012, NAFA has defined 24 key performance indicators by which to monitor the work of county directorates. In the county of Sibiu, *the level of voluntary compliance indicator of the taxpayers to pay tax obligations* had the value of only 78%. Instead, the *"additional amounts drawn by an inspector, following tax audits due to corporate taxpayers"* indicator was 2146000 lei / inspector, with 43% higher than the imposed target of 1500000 lei / inspector, and the *"additional amounts drawn by an inspector, tax audits due to individual taxpayers"* was 3215000 lei / inspector, with 6.43 times more than the target imposed of 500000 lei / inspector (General Directorate of Public Finance Sibiu County, Performance Report for the year 2012). Consequently, DGFP Sibiu has

exceeded its target at the indicator "the degree of achievement of budget revenues" with 6.91%, but the collection rate based on voluntary compliance remained low. The question is: increasing the number of taxpayer's fines makes the tax system more efficient?

#### 4. Conclusions

Current approaches regarding performance measurement in the public sector take into account the multidimensional nature of the public sector performance and have given up on the supremacy of the financial indicators. But the image of performance measurement systems is still confusing because they are necessary, but can give rise to undesirable effects, contrary to expectations and are subject to the risk that "*perverse effect of performance measurement may eventually drive out the beneficial effect*" (Hans de Bruijn, 2007, pg.33). In such situations there are cases of *performance paradox which refers to a weak correlation between performance indicators and performance itself*"; these paradoxes result from the "*discrepancy between the policy objectives set by politicians and the goals of executive agents*" (Van Thiel Sandra, Leeuw Frans L., 2002, pg. 271 and pg. 275). The undesirable effects of performance measurement in the public sector can take different forms, but their knowledge is useful in building an optimal system for managing and measuring the performance.

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#### 6. References

- Boyne George A., Kenneth J. Meier, Laurence J. O'Toole Jr and Richard M. Walker, (2006), *Public Service Performance*, Cambridge University Press.
- Cai Zhonghua, wangYe, (2012), *Research Frontiers in Public Sector Performance Measurement*, Elsevier, Physics Procedia 25 (2012), page 794.
- Comaniciu Carmen, Bunescu Liliana, (2012), *Coordinates of Total Quality Management in Fiscal Administration, Review of general Management*, volume 12, issue 2, pg.139-148.
- De Bruijn Hans, (2002), *Performance measurement in the public sector: strategies to cope with the risks of performance measurement*, International Journal of Public Sector Management, Vol. 15 Iss: 7, pp.578 – 594.
- De Bruijn Hans, (2007), *Managing Performance in the Public Sector*, 2<sup>nd</sup> Edition, Routledge, Taylor and Francis Group, 2007, pg. 17 – 33.
- European Institute of Public Administration, *A common European quality management instrument for the public sector developed by the public sector*, disponibil online la <http://www.eipa.eu/en/topic/show/&tid=191>, accessed in 20.06.2014.

- General Directorate of Public Finance Sibiu County, *Performance Report for the year 2012*, available online at [http://www.finantesibiu.ro/pagini/raport\\_performanta.php?van=2012](http://www.finantesibiu.ro/pagini/raport_performanta.php?van=2012), accessed in 20.06.2014
- Heinz Handler, Bertrand Koebel, Philipp Reiss, Margit Schratzenstaller, (2004), *The Size And Performance Of Public Sector Activities In Europe*, work prepared by the authors for European Commission's Competitiveness Report 2004 available online at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1861528](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1861528)
- Howard Rohm, (2002), *Improve Public Sector Results with a Balanced Scorecard: nine steps to success*, U.S Foundation for Performance Measurement.
- Kaplan Financial Knowledge Bank, *The performance Pyramid*, available online at <http://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/The%20Performance%20Pyramid.aspx?mode=none> accessed in 15.06.2014.
- Measuring performance of the public sector- problems and approaches, Components of Performance Measurement*, available online at <http://www.slideshare.net/miniverma1/measuring-performance-of-the-public-sectorproblems-and-approaches>
- Modell Sven, (2004), *Performance Measurement Myths in the Public Sector: a Research Note*, Financial Accountability and Management, 20 (1), Blackwell Publishing Ltd.
- Nan Chai, (2009), *Sustainability Performance Evaluation System in Government. A Balanced Scorecard Approach Towards Sustainable Development*, Springer.
- Neely Andy, Chris Adams and Mike Kennerley, (2002), *The Performance Prism. The Scorecard for Measuring and Managing Business Success*, Financial Times Prentice Hall an imprint of Pearson Education, page xi.
- Newcomer K., (2003), *Measuring Government Performance*, George Washington University, Washington.
- OECD, *Performance Management in administration: performance measurement and results-based management*, OECD Work on Public Management 3/1994, Romanian Edition Babes Bolyai University, 1999, page 35.
- Profiroiu M. și Profiroiu A., *Cadrul de analiză a performanțelor sectorului public*, în revista „Economie teoretică și aplicată” available online la <http://store.ectap.ro/articole/180.pdf>
- Profiroiu M., (2001), *Managementul organizațiilor publice*, București, Editura Economică.
- Ștefănescu Aurelia, Daniela Artemisa Calu, Eugeniu Țurlea, Florina Nicolae, (2010), *Approaches Of The Role Of Performance Into The Public Sector Entities From Romania*, TIBISCUS, Annals. Economic Science Series (XVI/2010).
- The NAFA strategy 2013-2017*, available online at [http://static.anaf.ro/static/10/Anaf/Prezentare\\_R/Strategia\\_ANAF\\_2013\\_2017\\_V7\\_1.pdf](http://static.anaf.ro/static/10/Anaf/Prezentare_R/Strategia_ANAF_2013_2017_V7_1.pdf) accessed in 21.06.2014.
- Van Thiel Sandra, LeeuwFrans L., (2002), *The Performance Paradox in the Public Sector*, Public Performance and Management Review, Vol. 25, No. 3, March 2002, Sage Publication, pg. 267-281.
- Vivienne Jupp, Mark P. Younger, (2004), *A value model for the public sector available online at* [http://www.accenture.com/SiteCollectionDocuments/PDF/hp\\_gov.pdf](http://www.accenture.com/SiteCollectionDocuments/PDF/hp_gov.pdf)