

CONSIDERATIONS REGARDING PERFORMANCE MEASUREMENT IN THE PUBLIC SECTOR

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Abstract:

The study of performance in the public sector is still a subject of intense investigation, but which gives rise to contradictions. The need for monitoring performance in the public sector is certain, the problem that exists is "how to monitor it?", so as not to fall into the trap of performance. What principles and characteristics must a management and performance measurement meet in order to be fully capable to generate real performance and not give birth, or even restrict speculative behaviors? This article aims to identify the features of an optimal system of performance monitoring in the public sector, characteristics that must be fulfilled by performance indicators and to conduct a comparative analysis of the level of performance of the public sector in the EU member countries based on a score function.

Keywords: *performance measurement, performance indicators, public sector.*

JEL classification: *H50, H70.*

1. Introduction

Measuring the performance in the public sector is a controversial topic that has given rise to many differences of opinion, for example:

- *Shall we measure or not the performance in the public sector?*

The followers of performance measurement assume the existence of some limited public funds that must be used judiciously, and by introducing a

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performance measurement system public funds users will be stimulated to use them rationally. The opponents of this idea emphasize the differences between the purpose and the objectives of the private and public sector. The public sector must fulfill objectives with social character that are not profitable to be offered to the population by the private sector. In this case, public decisions should not be made solely based on costs. And the introduction of a performance measurement system may lead policymakers to implement less costly public projects in the detriment of those consuming more resources but that may be more useful to the society. However, in the absence of performance measurement the danger of losing control of the organization arises. And public organizations, as private ones must give value for money.

➤ *Why should we measure performance in the public sector?*

The purpose of performance measurement can influence its achieving / not achieving method. Do we measure performance to see the good/bad points of the organization and to learn from the results, or we measure performance to attract public funds from the national budget or to apply a system of remuneration for the employees based on performance? The performance report must be made public or it is intended for internal use?

➤ *Do we use financial / non-financial indicators in measuring the performance in the public sector?*

Financial indicators have held and still hold supremacy in some countries in the performance measurement systems in the public sector. However, it turned out that the exclusive use of these indicators does not stimulate performance but generates speculative behaviors that are totally counterproductive for the performance concept. Financial indicators are not able to capture the method of achieving the goals of the public organization. Currently, most performance measurement systems in the public organizations have multidimensional character, using both financial and non-financial indicators.

➤ *It is enough just to measure performance?*

In many cases, the indicators only give us some numbers, but not the way of obtaining results. Indicators can distort reality, which is why it is advisable to be present not only a performance measurement system but to be implemented within the organization a comprehensive system for performance

monitoring, management and measurement. The concept of performance should be implemented at every level, and not just measured as final activity.

➤ *What systems of management and performance measurement respond best to the specific of the public sector?*

The PM systems were initially created for the private sector, taken and adapted for the public sector. But which of these systems are indicated for use in the public sector: Total Quality Management, Performance pyramid, Balanced Scorecard for public sector, Performance Prism, Public service value model (PSV), Benchmarking, etc.?

2. The features of an optimal management performance system in the public sector

Often, the performance management is limited to the use of some performance measurement indicators and does not involve the design of an implementation performance system, for obtaining, monitoring, and reporting it. The objective of the performance management in the public sector is to fundament the decisions that must be taken that would generate enhanced results in the use of the community. Performance measurement in the public sector is a concept that has no standard definition. But, generally it requires fulfilling the effectiveness indicators (relationship between inputs and outputs), the efficacy indicators (relationship between outputs and outcomes), the quality indicators and the timing indicators (MiralMetawie and Mark Gilman, 2005). MituNarcis E. defines the performance measurement process as being "a sequential action adopted within or outside the public institution in order to establish performance standards, to evaluate performance and to take some corrections where they are required (Mitu N. E., 2006: 176)."

In the vision of Sandor S.D. and Raboca H. measuring performances (designed as an performance insurance system, not just its technical measurement) should be thought of as a model that allows a systemic approach, holistic put in touch with the organization and with the external environment (SandorSorin Dan, RabocaHorea, 2004:154).

Or even if the performance management in the public sector is thought of as a system, many times it turns out that it does not generate real performance. The reason is the lack of an organizational culture based on achieving performance. Bernard Man emphasizes that the starting point in

implementing a successful performance management system is creating a "performance driven culture" that is based on organizational learning. The same author has identified:

➤ *four elements of a culture based on performance*: 1) creating a sense of community and common purpose within the organization; 2) clear and accepted responsibility for delivering results and performance within the organization; 3) honesty and truth in the declaration of results, 4) a clear definition of what a culture that is performance-based, creating understanding and acceptance of performance-based culture within the organization.

➤ *four main tools useful to create a culture based on performance*, namely: (1) a strong performance driven leadership; (2) a performance-based reward system; (3) a suitable mechanism of communication and reporting; (4) organizing interactive meetings and constructive on performance theme (Bernard Marr, 2008:241).

Only after building an organizational culture based on performance, after the employees have been trained in using performance indicators it can be introduced a management system based on obtaining and reporting performance. In a general sense, there must be created a favorable context involving a favorable organizational culture but is also necessary the political will to support and promote such an endeavor.

Prior to the construction and implementation of an optimal system for ensuring performance, its functions must be set. The functions of a performance management system include:

- to encourage learning and performance improvement within the public organization;
- to stimulate employee engagement by linking their remuneration to the performance obtained;
- to control the activity of the organization by the higher structures (Parliament, external auditors, etc.) or within the organization by managers;
- to base the allocation of public funds towards the organization;
- to ensure the transparent use of public funds;
- to serve for some comparative analysis nationwide.

An optimal system for ensuring performance in the public sector must be built taking into account the functions that must be fulfilled, and also the following features:

- *it must be shaped according to what the community expects from the organization*, it must be complex to be able to respond to different functions and objectives (OECD, 194:14-15). In order to build a performance ensuring system the relevant, realistic, clear and measurable objectives must of the public organization must be defined. This is done starting from the purpose and mission of the public organization the society. Once defined these major objectives there can be set interim targets set at operational level, for the internal environment of the firm: on departments, on employees, but we should not neglect the true role of the organization in the society. The overall objectives should be correlated with specific objectives and with the targets set for them. The targets should be set realistically, if they are overestimated they cause rejection among the staff, and if they are understated they create the impression of false performance.

- *It must be built so as to serve the informational needs of the internal and external users*. The informational needs of different users are different, so the system created must be able to generate information reports tailored to their requirements.

- *It must include performance indicators capable to measure the fulfillment level of the objectives set prior and all the dimensions of the performance* (resource economy, efficiency, effectiveness, quality, financial performance, and timing). The performance measurement should be done in terms of an internal perspective (the internal environment of the organization) and from an external perspective (in terms of the organization's service beneficiaries). So the performance indicators will vary depending on the responsibilities of those whose performances are also measured by the requirements of those who use the information (OECD, 1994:29). But they must not abuse the excessive use of the performance indicators, to try and measure and what is not measurable.

- *To be valid*, it should not generate false information, speculative behaviors. In this sense the pilot studies are useful.

- *To be transparent and accepted* by the internal and external users. It is recommended that staff be involved in developing the performance criteria and communicate their results in order to not be perceived by employees that the PM system just aims for reduced costs, penalizing those less successful, etc.

- *To be fair*, this can be achieved through interaction and consensus between managers, staff and higher organisms in building the performance indicators.

- *To ensure its continued use, but also to be dynamic*. A PM system produces benefits only if it is used continuously because in this way you can achieve dynamic analysis, you can identify causes, measures, measurable effect. But at the same time it must be dynamic, meaning it can be adapted to new conditions, goals, new dimensions of performance.

- *To be flexible*, to stimulate innovation within the organization. Frequently, measuring performance leads to stifling innovation because employees will perform their work tasks according to performance indicators that must be met. Therefore, it is advisable to also be included performance indicators that would stimulate innovation (for example: number of new ideas, new products / services, cost / resources / time savings, etc.). Performance indicators should capture a larger variety from the work of employees, not just their final results. In this way it remains active the staff motivation and their interest towards process improvement.

- *To have an impact that will not cause employees to generate perverse effects*. The impact of the management and measurement performance system must be established by consensus by all parties involved (managers, employees, external public body) (Hans de Bruijn 2007:62, 156).

- *To be subjected to the external audit* in order to ensure the legitimacy of the information.

3. The characteristics of the performance indicators

Performance indicators are tools of the performance measurement process system, component of the performance management system. They need stability and they must be built by skilled persons but with the consultation of those affected by these indicators because they have a major

role in ensuring the success of a performance management system. Performance indicators help to achieve real performance if they are properly constructed and accepted, but they can as well cause speculative behaviors, obtaining false performance if they not respect some essential features:

- *To be measurable.* We cannot set performance indicators for things that really cannot be measured, but also indicators for issues that can be easily measured. The representative aspects must be identified and relevant performance indicators to measure them must be defined.

- *Easy to understand and use* by those who must comply and report them. Performance indicators should not be imposed by the management, but they must be established through consensus. Otherwise, Bernard Marr has exposed what might happen: "*hitting the target but missing the point or ignoring areas of performance that are not measured or where no targets apply.*" If some indicators are imposed by external public authorities and which are not directly related to the strategic objectives of the organization, then they must be managed separately from the internal monitoring performance system (Bernard Marr, 2008:153).

- *To be coherent, adapted to strategic objectives.*

- *To not have dysfunctional consequences*, meaning to provide resistance to tampering.

- *To be used an appropriate number of essential indicators*, too many indicators will create the sensation of dilution of the objectives pursued, too few indicators will not capture reality.

- *To have fixed a target* that would allow positioning the achievement degree of that objective.

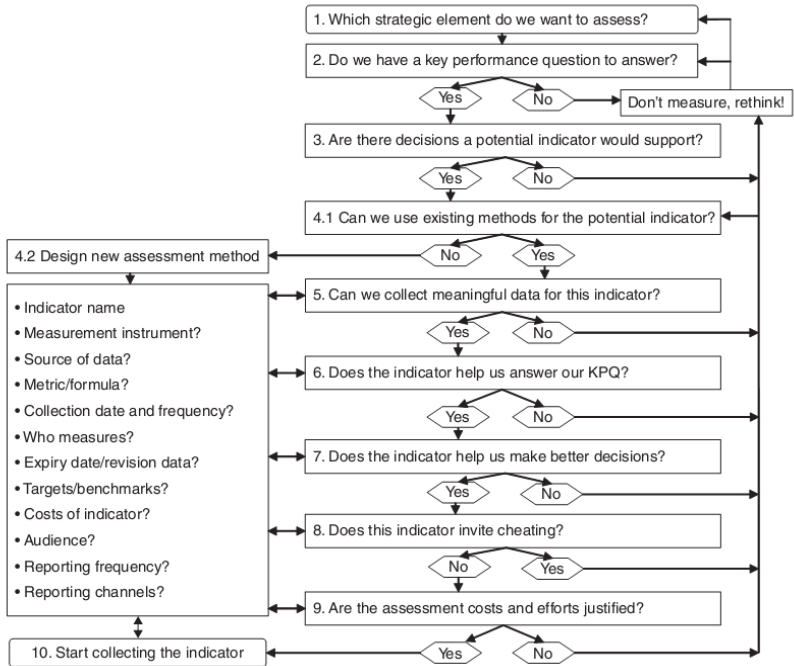
- *Adaptability to new requirements*, that is to be flexible and dynamic in order to adapt to the environmental demands and to stimulate the performance boost; otherwise they will turn into simple statistical indicators.

- *To be effective*, their calculation should not involve a high consumption of financial, time, human resources, etc.

- *It should not be ambiguous* and not give rise to multiple interpretations. The purpose of the indicator must be clearly defined in order not to give rise to confusions and doubts among users.

Bernard Marr has built a logical scheme particularly useful in building a performance indicator, shown in figure 1.

Figure 1: Performance indicator decision framework



Source: Bernard Marr, (2008), *Managing and delivering performance*, Butterworth-Heinemann imprint of Elsevier, pp. 179

4. Benchmarking analysis over the sustainable performance of the public sector from the EU member countries

In this section there will be a sustainable performance analysis at macroeconomic level, meaning per whole public sector in the member countries of the European Union (EU). It will be examined the external performance generated by the entire public sector on the three dimensions of the sustainable performance: economic, social and environmental, from the perspective of the public value created.

The public value created will be analyzed with the help of the instrument built by Accenture, by the authors Martin Cole and Greg Parston called “Public Sector Value Model”. The model allows measuring the public value created through the outcomes generated and through cost effectiveness.

In this regard, the sustainable performance measurement model will be focused on:

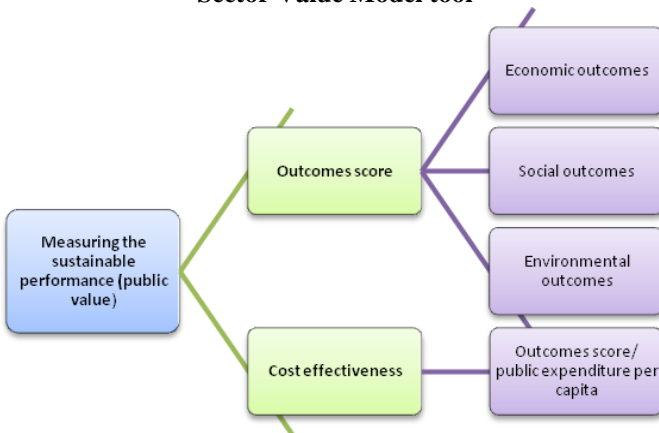
- *Building a score of the outcomes* generated by the state in the society in order to ensure the economic, social and environmental balance;

- *Building the indicator that would express cost effectiveness*, obtained through reporting the outcome score at the level of public spending per capita in expressed in euro / inhabitant.

Based on these two variables, the EU member countries will be divided into four categories:

- Countries that record a sustainable performance;
- Countries oriented towards budget rationalization;
- Countries quality-oriented;
- Countries with low performance.

Figure 2: Measuring the sustainable public sector performance using the Public Sector Value Model tool



Source: author's own elaboration

This instrument, Public Sector Value Model, will measure the sustainable performance in the public sector of a country based on the indicators proposed in the section below.

The diagram presents the methodology for measuring the sustainable performance of the public sector using two variables, figure 2: the outcomes level generated overall and per the three dimensions (economic, social, environmental) and the total public expenditure level per capita .

The outcomes score contains three categories of sustainable performance indicators; each indicator is composed of a variable number of sub-indicators:

Table 1: Indicators and subindicators of the public sector sustainable performance

INDICATORS	SUBINDICATORS
1. Economic performance indicators	<i>IE1 - Shadow economy</i>
	<i>IE2 - Infrastructure quality</i>
	<i>IE3 - Stability of GDP growth</i> - for the period 2003-2013
	<i>IE4 - Inflation</i> - for the period 2003-2013
	<i>IE5 - GDP per capita</i> at PPP for period 2003-2013
	<i>IE6 - GDP growth</i> - for period 2003-2013
	<i>IE7 - Public debt</i> as % from GDP
	<i>IE8 - Gini Index</i>
2. Social performance indicators	<i>IS1 - Corruption</i>
	<i>IS2 - Death rate due to chronic disease</i>
	<i>IS3 - Early leavers from education and training</i>
	<i>IS4 - Infant mortality rate</i>
	<i>IS5 - Judicial independence</i>
	<i>IS6 - Life expectancy</i>
	<i>IS7 - People at risk of poverty</i>
	<i>IS8 - Education achievement</i>
	<i>IS9 - Secondary school enrolment</i>
	<i>IS10 - Tertiary education attainment</i>
	<i>IS11 - Unemployment</i>
	<i>IS12 - Youth unemployment,</i>
	<i>IS13 - Red tape</i>
3. Environmental	<i>IE n1 - Energy dependence</i>

performance indicators	<i>IEn2 - Primary energy consumption</i>
	<i>IEn3 - Share of renewable energy</i>
	<i>IEn4 - Greenhouse gas emission</i>
	<i>IEn5 - Forest net annual increment</i>

Source: indicators elaborated based on the articles AntónioAfonso, Alma Romero, Emma Monsalve, (2013), *Public Sector Efficiency: Evidence for Latin America*, Inter-American Development Bank Fiscal and Municipal Management Division, DISCUSSION PAPER No. IDB-DP-279; Mihaiu Diana Marieta, *Sustainable performance in the public sector, between defining and measuring the concept*, International Journal of Arts and Sciences, International Conference for Academic Disciplines, University of London, November 2014.

The three categories of indicators hold an equal share in the construction of the outcomes total scores because the reason for necessity of the public sector is to equally ensure the economic and social development of the country, without harming the environment and without adversely affecting future generations.

Each sub-indicator is weighted equally in the construction of the parent indicator.

Standardization of data was performed by reporting each value of the sub-indicators at the best value because it is wanted to identify the best performing countries in the areas covered by this survey.

Based on the methodology presented we propose the following measuring score of the outcomes generated by the public sector from the EU member countries:

$$\text{Outcomes score} = \text{IE} + \text{IS} + \text{IEn} = (\text{IE}_1 + \dots + \text{IE}_8) + (\text{IS}_1 + \dots + \text{IS}_{13}) + (\text{IEn}_1 + \dots + \text{IEn}_5)$$

In order to have a complete picture of the sustainable performance of the public sector we need the public value created. And the **public value created** has, in turn, two dimensions:

- *the outcomes level*, analyzed above
- *the cost effectiveness*, an aspect that will be further analyzed.

In order to be performing in a sustainable way, the public sector must deliver economic, social and environmental friendly results that would also be efficient from the perspective of the public financial expenditures involved. The financial side cannot be neglected because the budgetary resources are always limited.

Table 2: The level of the outcomes and the cost effectiveness in the EU member countries, 2013.

Country	Global outcome score 2013	Public expense / capita	Cost effectiveness
Austria	15,81	1,55	10,22
Belgium	13,92	1,61	8,63
Bulgaria	12,11	0,17	72,65
Czech	13,73	0,50	27,70
Cyprus	14,31	0,75	19,09
Croatia	12,57	0,38	33,35
Denmark	17,16	2,07	8,29
Estonia	15,50	0,37	41,51
Finland	17,48	1,73	10,09
France	15,12	1,55	9,78
Germany	15,60	1,16	13,39
Greece	11,60	0,79	14,63
Ireland	15,32	1,40	10,96
Italy	11,62	1,09	10,66
Latvia	13,44	0,28	48,84
Lithuania	14,62	0,27	54,89
Luxembourg	17,76	3,35	5,30
Malta	13,50	0,62	21,90
Netherlands	16,80	1,44	11,70
Poland	14,59	0,33	43,72
Portugal	12,79	0,65	19,75
Romania	12,22	0,20	62,24
Slovakia	12,33	0,43	28,77
Slovenia	14,69	0,86	17,04
Spain	13,28	0,89	14,90
Sweden	18,45	2,02	9,13
Hungary	11,98	0,38	31,18
UK	15,30	1,18	12,99

Source: author's own calculations

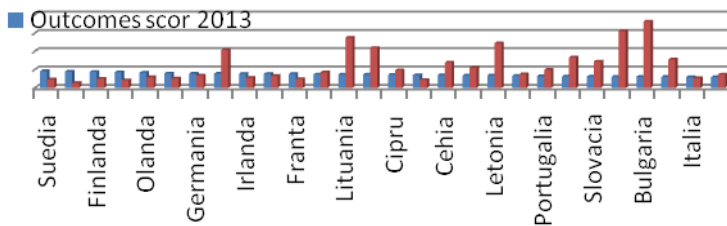
It can be seen that the average outcome level obtained by the public sector among the EU member states is 14.615, but there are significant deviations from this average which indicates the existing disparities between countries.

The outcomes score function can record a maximum value of 26, but no EU country has obtained the maximum score in the year 2013. The highest value of the function was registered by Sweden (18,453), being considered the country with the most performing public sector, followed by Luxembourg (17.764), Finland (17.483), Denmark (17.159). On the opposite side there are countries that have the lowest values of the function, namely: Greece (11.595), Italy (11.624), Hungary (11.984), Bulgaria (12.113), Romania (12.216).

The average of the public expenditure per capita is 12 972 euro / capita, but variations from the average are high. Luxembourg is the country with the highest public expenditure / capita of 43 451 euro / inhabitant, followed by Denmark with 26 834 euro / inhabitant, Sweden 26 218 euro / inhabitant, Finland 22 484 euro / inhabitant. The lowest values are recorded by: Latvia 3568 euro / inhabitant, Lithuania 3454 euro / inhabitant, Romania 2 546 euro / inhabitant, Bulgaria 2162 euro / inhabitant.

This indicator, the public expenditure / capita, influences the cost efficiency alongside the outcomes level, a relationship reflected in the chart below.

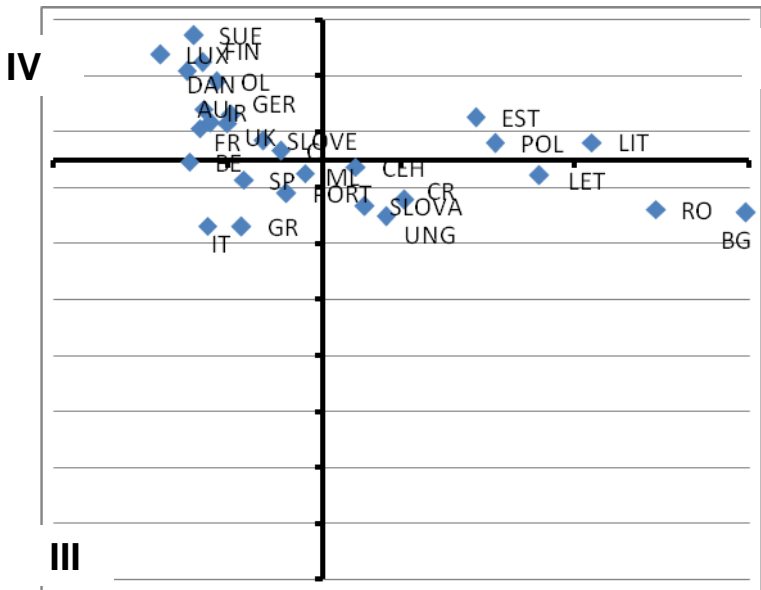
Figure 1: The relationship outcome - cost efficiency in the EU member countries, 2013



Source: author's calculations

It can be seen that a relatively balanced relationship between the outcome and cost effectiveness level is found in Germany, Great Britain and Italy.

Figure 2: Public Sector Value Model for EU member countries, 2013



Source: author's calculations

II

Based on the above schedule we may outline four quadrants which reflect the sustainable performance state in the EU countries in terms of the public value created materialized in outcomes generated in terms of cost efficiency conditions:

- **Quadrant I - countries that record sustainable performance**, meaning they obtained outcomes above average in terms of ensuring high cost effectiveness: Estonia, Poland, Lithuania. These countries have rationally used the public funds obtaining favorable results. Even if they don't record the highest level of outcomes, they prove that if they will invest public funds in an increased amount they will achieve superior results.
- **Quadrant II - countries oriented towards rationalizing the budget**, are those countries that have achieved outcomes below the EU average but have used the public funds effectively. They cannot be accused of inefficiency, but of a reduced, inadequate funding. In the

future, they should proceed to increase public funding in order to enhance results. These countries are: Bulgaria, Romania, Latvia, Czech Republic, Croatia, Slovakia and Hungary.

- ***Quadrant III - non-performing countries***, meaning those countries which have a low efficiency outcome level and low efficiency cost. In this case measures should be undertaken in order to make efficient use of the public funds before increasing financial allocations. These countries are: Italy, Greece, Spain, Portugal, Holland and Belgium.
- ***Quadrant IV - quality-oriented countries*** are those countries that have achieved very good results, but with high costs. They have a global level of outcomes above average but the cost effectiveness is inferior determined by a high public / capita expenditure. In this category we can mention: Cyprus, Slovenia, France, Britain, Germany, Ireland, Austria, the Netherlands, Denmark, Finland, Luxembourg and Sweden

Countries that have clearly created public value and have recorded a sustainable performance are the countries in quadrant I. The countries from quadrant II and quadrant IV have created an ambiguous value because they either recorded small outcomes accompanied by reduced costs or high outcomes but with high costs. And the countries in quadrant III did not create public value because their public funds were used inefficiently.

5. Conclusions

An ensuring performance system is a complex system that should aim to achieve multiple objectives of different nature that addresses internal and external stakeholders of the public organization: employees, managers, citizens, and other public or private companies, public authorities. This system should provide a balance between stability, flexibility and dynamism (Gloria A. Grizzle, 1982); to stimulate public employees and managers to interact and converge towards meeting the objectives of the organization. An assurance performance system should be created taking into account the characteristics mentioned in Part 2, otherwise it will generate more adverse effects than positive aspects. Also, we need to know the limits of the system and established purposes for the adequate use. Giving an exaggerated importance to the purpose and to the impact of measuring performance may adversely impact the effectiveness of the performance management ensuring system within the public organization. Major decisions should not be based solely on

the results of the performance indicators, but they should be correlated with other deeper analysis that would confirm or infirm the validity of the results. If the remuneration of the public employees or funding the public organization is based only on the figures from the performance report without any deeper analysis over the process of obtaining the indicators in question, then the temptation to "gaming the numbers" will be much higher among employees and / or public managers. It is preferable that a performance assurance system to be used to stimulate learning, process improvement, and not to be the base for granting funding / remuneration.

We propose as method of analysis of the sustainable performance at macroeconomic level the public value created by the country under review. Public Value has two dimensions, namely: a first dimension is the level of the outcomes, particularly important for the role of a state, and the second dimension is the cost effectiveness because no public decision can be adopted without an analysis of the financial implications. Public Sector Value Model developed by Accenture quantifies the public value created and was applied on the example of the European Union member countries. Countries that have clearly created public value and that have recorded a sustainable performance are: Estonia, Poland and Lithuania. Countries with reduced performance, meaning those countries which have a low efficiency outcome and low-cost efficiency are Italy, Greece, Spain, Portugal, Netherlands, Belgium.

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