

# *Organizational Size as a Determining Factor of Performance and Quality Measurement: Lessons for the Croatian Local Self-Government*

*Romea Manojlović\**

UDK 35.071.5(497.5)  
35.072.2(497.5)  
Original scientific paper / izvorni znanstveni rad  
Received / primljeno: 11. 10. 2015.  
Accepted / prihvaćeno: 20. 7. 2016.

Performance measurement is an instrument used with the purpose of collecting information on different performance dimensions. Apart from performance, public sector organisations need to devote their attention to the quality of services. The problem with quality in the public sector is that it is hard to define and to measure. Quality measurement is defined as the measurement of citizen satisfaction with the services provided, the speed at which the services have been delivered, the attitude of public servants toward the citizens, and the use of quality improvement instruments. The paper investigates whether organisational size (the number of persons employed and the total budget) has any effect on performance and quality measurement. The results are used to formulate suggestions about local self-government

---

\* Romea Manojlović, assistant professor at the Chair of Administrative Science, Faculty of Law, University of Zagreb, Croatia (docentica na Katedri za upravu znanost Pravnog fakulteta Sveučilišta u Zagrebu, e-mail: romea.manojlovic@pravo.hr)

reform in Croatia and for the improvement of performance and quality measurement therein. Results from the empirical research conducted within the central and local government in Croatia in 2014 are presented.

*Keywords:* performance measurement, quality measurement, organisation size, Croatia

## 1. Introduction

Performance measurement is a well-known managerial instrument used in public sector organisations in a number of states (Bouckaert & Haligan, 2008). The basic purpose of this instrument is to receive information on different performance dimensions, which can be used for multiple purposes.<sup>1</sup> Apart from performance measurement, in the public sector attention should be paid to the quality of the services provided to the citizens. Although quality is a difficult concept to define, it still needs to be measured and there is a selection of quality improvement instruments used to measure and enhance the quality of services and public organisations (Džinić, 2014).

The basic goal of the paper is to examine whether organisational size, operationalised as the number of persons employed in a public organisation and its total budget, has any influence on performance and quality measurement. Some previous research (Berman & Wang, 2000; Wang & Berman, 2001; Folz et al., 2009; Van Dooren, 2005; Salazar & de Arkos Martinez, 2013) has shown size to be important for performance measurement. However, no evidence of such research has been found in east European countries, nor specifically in Croatia, so this paper attempts to fill the gap. Hence the basic hypothesis that is being examined is that organisational size correlates positively with the number of performance and quality measures.

The second goal of the paper is to contribute to the debate about the need for territorial restructuring and reform of Croatian local units. Namely, the Croatian system of local self-government is composed of a great number of local units, the majority of which are rather small, both in terms of

---

<sup>1</sup>Van Dooren et al. (2010, p. 101) define three basic purposes of performance information use: learning, steering, and control and accountability.

population and economic capacity. If organisational size is a factor that stimulates performance and quality measurement, than this is an additional reason to suggest territorial reconstruction and the creation of a smaller number of bigger local units.

Methodologically, the paper relies on the use of questionnaires as a research method. The questionnaires were sent to 253 central and local public organisations (39.5% response rate) and the results were statistically analysed. These results are further supplemented by semi-structured interviews.

The second part of the paper intends to give a basic notion of what performance measurement is, provide a definition of performance that is applicable to this paper, and explain how quality can be measured in general and how it will be measured in this paper. The third part of the paper is devoted to hypothesis formulation, while in the fourth part the results of the conducted empirical research are presented and discussed. The last part of the paper presents theoretical conclusions and some practical suggestions.

## 2. Defining Performance and Quality Measurement

### 2.1. Performance Dimensions

When studying performance measurement, what first needs to be resolved is what is meant by the term *performance*. Siegel and Summermatter have conducted extensive research on how performance is defined, using papers published in 15 leading journals, and they have concluded that there is no singular definition (Siegel & Summermatter, 2008).

One possible way of defining performance is to consider it as a result of the production process.<sup>2</sup> Taking the production model of performance as a basis (Van Dooren et al., 2010, p. 18), it is possible to define outputs as

---

<sup>2</sup>Another way of defining performance is to consider it as the realisation of public values (Van Dooren et al., 2010, pp. 22-24). Although public values are indispensable in the public sector and values such as equity or fairness need to be measured as well, in this paper only the concept of performance defined as the result of the production process will be taken into consideration. The reason for this choice is the fact that the research conducted by Siegel and Summermatter (2008, p. 11) has shown values and ethics to be the least-used definitions and components of performance, while outcomes, outputs, and efficiency (which are elements of the production process) are the most frequently used ones. However, a possible way of expanding the concept and research is the examination of values as part of the performance concept.

the concrete results produced by the organisation and over which the organisation has complete control. Outcomes are the effects produced by the organisation. They are not the sole product of the organisation, but are also influenced by the environment. Outputs are never an end in themselves in the public sector: the public sector has to be oriented towards long-term outcomes (Bouckaert & Halligan, 2008, p. 16). Efficiency is the ratio of inputs to outputs, i.e., how many resources have been used in order to produce the outputs, while cost-effectiveness is the ratio of inputs to outcomes. Using these terms, performance can be defined as *the achievement of expected outputs and outcomes in relation to the resources used to achieve them (efficiency and cost-effectiveness)*. This definition enables us to extract four performance dimensions: outputs, outcomes, efficiency, and cost-effectiveness, whose measurement will be further examined.

## 2.2. Performance Measurement

Performance measurement can be defined in a number of ways (De Lancer Julnes, 2008, p. 1450; Bouckaert & Halligan, 2008, p. 26; Neely, 2008 in Moulin, 2002, p. 188; De Brujin, 2007, p. 10; Van Dooren et al., 2010, p. 25; Hatry, 2006, p. 3; Ketelaar et al., 2007, p. 8; Ammons, 2008, p. 1455; Klovienė & Valanciene, 2013, pp. 384-386) but it basically represents the number of activities used in order to obtain information on a variety of performance dimensions.<sup>3</sup>

Performance measurement is not a new concept in public administration; its roots can be found as early on as in the doctrine of cameralism, which was dominant on the European continent in the 18th and 19th century<sup>4</sup>, and it has continuously been present in public administration over the last two centuries.<sup>5</sup> However, its influence has become prominent since the beginning of the 1980s and the emergence of the doctrine of New

---

<sup>3</sup>This definition is in line with the definition given by Van Dooren et al. (2010, p. 25), who state that performance measurement is a bundle of deliberate activities of quantifying performance.

<sup>4</sup>The basic goal of cameralism was the improvement of state management in order to achieve a general well-being (Puljiz, 1999, p. 299). For more on cameralism see Koprić & Marčetić, 2003, pp. 215-216; Pusić, 2002, pp. 46-47.

<sup>5</sup>Van Dooren has identified 14 movements, starting from the 17th century, that have had an impact on performance measurement (Van Dooren, 2006, pp. 47-79). Data on the historical development of performance measurement can also be found in Talbot, 2010, pp. 143-167 and Heinrich, 2007, pp. 25-28.

Public Management (NPM), which had as one of its basic provisions the orientation toward outputs and their measurement.<sup>6</sup> Although NPM has generated a great number of flaws (Koprić, 2006, p. 355) and it is now possible to speak of the end of the pure NPM,<sup>7</sup> new administrative doctrines, such as the doctrine of the Neo-Weberian State, include performance measurement as one of their important components (Bouckaert & Pollitt, 2011, pp. 118-119; NISPAcee, 2008/09).

Accordingly, it is possible to say that performance measurement has found its place in the public administrations of many countries, in all levels of government as well as in international organisations (Van Thiel & Leeuw, 2003, p. 267). Basically, performance measurement is here to stay (de Lancer Julnes, 2009, p. 8).

Performance measurement needs to be distinguished from performance management. Namely, performance management comprises not only the pure measurement of performance dimensions, but also the use of received performance information in a variety of functions (such as budgeting, planning, accounting, etc.). There is research testifying that the use of performance information (performance management) increases overall organisational performance (Walker et al., 2011; McGuire & Gerrish, 2015). Measurement is one component of the performance management process; it stimulates information usage, but measurement in itself is not sufficient to ensure that the received information will actually be used (De Lancer Julnes & Holzer, 2001, pp. 700-701; Ammons & Rivenbarck, 2008; Yang & Hsieh, 2007, pp. 867, 869; Sanger, 2008, p. 72).

Performance measurement and performance management can create numerous benefits. First of all, the purposeful use of performance information can rationalise the decision-making process and stimulate so-called *evidence based management* (Pfeffer & Sutton, 2006), in which decisions are not taken based on subjective feelings but rather on concrete data. Also, the publication of performance data can increase the accountability of public organisations, and the government in its entirety, towards the citizens: if the citizens know the level of performance they may expect, then they can control whether it has been achieved and whether they are satisfied with it. The publication and use of performance information

---

<sup>6</sup>In the USA, this orientation is most clearly explained by the famous book "Reinventing Government", in which the authors state that only "What Gets Measured Gets Done" (Osborne & Gaebler, 1992, pp. 146-147).

<sup>7</sup>As Drechsler & Kattel (2008) put it: "Towards the Neo-Weberian State? Perhaps, but Certainly Adieu, NPM".

can therefore improve communication between the public administration and the citizens, but also communication within the organisation itself (Melkers, 2006). Performance measurement can stimulate innovation processes within the organisation, benchmarking between organisations (Van Dooren et al., 2010, pp. 152-154), and the creation of a new organisational culture oriented towards performance improvement.

It is important to be aware that performance measurement can bring about a number of unintended consequences, such as an exclusive orientation towards the subjects that are being measured and a neglect of other activities in the organisation, fabrication of performance information, spending time and resources on various measurements without ever using the data and forgetting why the measurement had been conducted in the first place, etc.<sup>8</sup> Also, politicians can be contrary to performance measurement because the publication of performance data can show their failure in achieving some of the promised goals (Behn, 2002, pp. 8-9). Therefore, in order to avoid any unintended consequences, performance measurement needs to be conducted in a proper manner.

### 2.3. Defining Quality and its Measurement

In order to emphasise the importance of quality in the public sector, some authors consider quality to be an intermediary outcome (Hatry, 2006, p. 19), but it is necessary to admit that quality is a difficult concept to define and operationalise (Džinić, 2012, pp. 1005-1011).

The evolution of the concept of quality has passed through three phases. In the first phase quality was understood as respect for norms and procedures. In the second phase, which can be observed at the beginning of the 1960s, quality was understood as effectiveness, meaning that the product/service served its purpose and the purpose of the consumers. Finally, in the last development phase, quality has come to be understood in the sense of customer satisfaction (Beltrami, 1992, p. 770, in Löffler, 2004, p. 6).<sup>9</sup>

<sup>8</sup>For negative consequences of performance measurement see Bouckaert & Balk, 1991; Van Dooren et al., 2010, pp. 158-166; Randor, 2010.

<sup>9</sup>Presently, it is even possible to speak of quality as the realisation of the overall quality of life and well-being of the citizens. The OECD is a frontrunner in this field, stressing that both the material elements of citizen well-being (such as income and wealth, jobs and earnings, housing) as well as other elements of the quality of life ((health status, work-life

Apart from difficulties in defining quality, there are difficulties in its measurement. In this respect, two approaches to quality measurement can be singled out. The first is to accept that quality has many shades and that it can be measured in different ways (Tampieri, 2006, p. 62), which means that different indicators of service quality can be chosen, for example: correctness, timeliness, accessibility, friendliness, simplicity, understandability, etc. (Setnikar Cankar, 2006, p. 52). The second is to use some of the various quality improvement instruments (QII). QIIs can be defined as comprehensive tools intended to measure organisational quality in its totality. Some of these instruments have been created for private sector organisations and then transferred into the public sector, while some have been created exclusively for public sector organisations (Talbot, 2010, pp. 169-184). Đžinić (2014) has classified 12 quality improvement instruments, starting from the simplest (citizen's charter) to the most complex one (EFQM Excellence Model).<sup>10</sup>

*Defining quality measurement in this paper.* In order to assess the degree of quality measurement present in public organisations, in this paper the combination of the first and the second approach to quality measurement will be adopted.

Four indicators of quality measurement will be taken into consideration. First, the paper will examine whether organisations measure the *timeliness (speed)* of their service delivery. Second, it will investigate whether organisations measure the *number of complaints made about civil servant conduct*. It is possible to suppose that complaints are made because of a neglect of appropriate rules and a lack of correctness on behalf of the servants. Third, the paper will explore whether organisations measure *citizen satisfaction* with their services. Finally, it will examine if organisations *use one of the four complex quality improvement instruments* (according to

---

balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security, and subjective well-being) should be measured (OECD, 2015, p. 22). Some OECD member states have already launched initiatives oriented towards well-being measurement (Röhn et al., 2013, pp. 5-6). However, the measurement of well-being is mostly macro-level oriented, taking into consideration the state as a whole. Because this paper deals with the organisational level, the examination of well-being will not be taken into consideration.

<sup>10</sup>The instruments are the following: citizen's charter, customer satisfaction investigation, audit, SWOT analysis, PEST analysis, ISO standards, business process reengineering, Balanced Scorecard, Plan-Do-Check-Act circle, Common Assessment Framework, quality awards, and EFQM Excellence Model (Đžinić, 2014, pp. 33-101).

the classification made by Džinić, 2014, pp. 33-101): ISO standards,<sup>11</sup> the Common Assessment Framework (CAF)<sup>12</sup>, participation in quality awards<sup>13</sup>, and the use of Balanced Scorecards (BSC).<sup>14</sup> Special attention will be devoted to BSC, because it represents not only a quality improvement tool (Džinić, 2014, pp. 62-67; Koprić et al., 2012, p. 204; Koprić et al., 2014, p. 127), but more importantly a multidimensional performance measurement model (Talbot, 2010, p. 170), whose use indicates that an organisation measures not only its overall performance but also devotes attention to quality improvement.<sup>15</sup>

---

<sup>11</sup> ISO standards are international documents defined by the International Organization for Standardization, which prescribes the requirements, specificities, characteristics, and instructions on how to ensure that certain products or services have an appropriate degree of quality and are fit for use. There are almost 20,000 ISO standards; however, the subcategory ISO 9000 is devoted to quality management, and public organisations often use the ISO 9001 standards because they can receive a certificate which confirms they have implemented the proper quality management system (<http://www.iso.org/iso/home/standards.htm>).

<sup>12</sup> CAF is a quality improvement instrument developed especially for public sector organisations. It is a self-evaluation questionnaire filled out by all the organisational members, which enables the organisation to see its weak points and benchmark the experience against other organisations using the same instrument (Džinić, 2014, pp. 40-45).

<sup>13</sup> Quality awards are given to organisations which distinguish themselves by the quality of their services. Giving awards to outstanding organisations can stimulate benchmarking and the diffusion of best practices. There are a number of quality awards developed for public sector organisations, such as the European Public Sector Award (EPSA). In Croatia there is the INPULS award given by the Croatian Association of Towns (Džinić, 2012; Džinić, 2014, pp. 56-58).

<sup>14</sup> BSC is a concept developed by R. Kaplan and D. Norton in their 1996 book "The Balanced Scorecard – Translating Strategy into Action". BSC presupposes the measurement of four organisational perspectives: financial, users, internal business processes, and organisational capacity, because their measurement can increase the overall quality of the organisation (Kaplan & Norton, 1996). Kaplan and Norton also state that in the public sector these four perspectives, originally developed for the private sector, can be reduced to the measurement of only three perspectives: costs incurred, value created, and legitimating support (Kaplan & Norton, 2001, pp. 136-137).

<sup>15</sup> The other three QIIs were chosen because previous research (Džinić, 2014) has shown that Croatian local units lag behind in the use of QIIs. When there is some use of QIIs, this is mostly limited to the use of citizen satisfaction surveys, ISO standards, and quality awards. Because citizen satisfaction is examined separately, the use of ISO standards and quality awards are examined as part of this indicator. CAF is included because it is an instrument created under the auspices of the European Union and because Croatia is the newest member state, this instrument allows for the assessment of the state of Europeanisation.

### 3. Size as a Determinant of Performance and Quality Measurement

#### 3.1. Literature Review and Research Hypothesis Formulation

There is a variety of literature dealing with performance measurement. When it comes to the examination of the relationship between size and performance measurement, there is some research that has shown size to be an important factor that stimulates outcomes and output measurement. In the USA, Berman and Wang (2000, p. 412) (see also Wang & Berman, 2001, p. 414) have concluded that larger counties adopt outputs and outcomes measures more in their functions. This was also confirmed in the context of American cities with a population of 25,000-250,000 inhabitants (Folz et al., 2009, p. 67). In Mexico, the size of government (fiscal revenues and staff) and the size of municipality (gross production and population) turned out to be positively related to the probability of performance measurement adoption (Salazar & de Arkos Martinez, 2013, p. 764). In Belgium, Van Dooren (2005, p. 376) has proved that larger organisations measure more.<sup>16</sup> Although the methodology implemented in these papers is different, as well as the time period and the studied organisations themselves, with necessary precautions their findings can be comparable and they all seem to indicate size is an important factor that stimulates performance measurement.

This last finding is the starting point of the research conducted in this paper. Namely, if size has proved important in the USA, Belgium, and Mexico, it can also be expected to influence performance measurement in Croatia. A further literature review was conducted to find similar papers discussing this topic in ex-socialist countries, because it is logical to assume that results found in these countries are more likely to fit the Croatian circumstances. Although there has been research on performance measurement in these countries, in this literature review no paper was found dealing empirically with the relationship between performance measurement and organisational size. This is in line with the findings of Nomm and Randma Liiv, who state that “the studies on the introduction

---

<sup>16</sup>It is important to emphasise that Van Dooren (2005) operationalised size as the number of persons employed in the organisation, while other authors have operationalised it as the total number of inhabitants of local units. However, it is possible to suppose that local units with more inhabitants have more people employed in their administration.

of particular performance-based management tools in central and eastern European countries have been rather descriptive and have ended up with contradictory conclusions” (Nomm & Randma-Liiv, 2012, p. 860).<sup>17</sup>

This paper attempts to contribute to the empirical research on performance and its measurement on the territory of eastern European countries and to assess whether size is a determinant of performance measurement.

Starting from previous research findings, it is possible to assume that organisational size correlates positively with the measurement of a greater number of performance dimensions (outputs, outcomes, efficiency, cost-effectiveness).

Therefore, the main research hypothesis of this paper is the following:

*H1: Organisational size correlates positively with the number of performance measures.*

The same reasoning (*per analogiam*) can be adopted with regard to quality measurement, and it is possible to assume that organisational size will influence not only performance, but quality measurement as well, meaning that bigger organisations will measure their timeliness, complaints about civil servant conduct, and citizen satisfaction, and will also use more quality improvement instruments.

This enables us to formulate the second research hypothesis:

*H2: Organisational size correlates positively with the number of quality measures.*

### 3.2. Operationalising Organisational Size

Although it may seem easy to define organisational size, there are a number of different operationalisations. Kimberly (1976, pp. 587-588) states that organisational size can be defined as the physical capacity of an organisation, as the personnel available to an organisation, as organisational input or output, or as the resources available to an organisation. Each of these operationalisations has its advantages and disadvantages, but in this paper two operationalisations will be chosen. Namely, organisational size will be defined as the *number of personnel employed by the organisation* and its *total budget (revenues allocated to the organisation)*. These two operation-

<sup>17</sup>The same is confirmed by Byne, who states that research on government performance relies on evidence from Anglo-Saxon and Scandinavian countries (Boyne, 2010 in Hammerschmid et al., 2013, p. 3).

alisations have been chosen because the number of personnel employed has proved to be the best indicator of organisational size (Child, 1973b, p. 170 in Kimberly, 1976, p. 582) and the budget is an essential component of public sector organisations, which determines their range of activities.

This sort of size operationalisation enables further conclusions. In the context of local self-government it is legitimate to say that local units (organisations) with more inhabitants have a greater number of civil servants employed in their administration, and a bigger budget.<sup>18</sup> That means if it is shown that organisational size is an important factor that stimulates performance and quality measurement, this will be an argument for the creation of bigger local units in terms of both territory and population.

### 3.3. Local Unit Size in Croatia

Croatia has a fragmented system of local self-government composed of 20 counties as second-level local units, the City of Zagreb as the capital city with the dual status of a first and second-level local unit, 428 municipalities as first-level local units created for rural areas, and 128 towns as first-level local units created for urban areas. Both the first and second-level local units are small. The average number of inhabitants in the counties is 174,887 (Koprić, 2013, pp. 11-12), the municipalities have an average of 2,957<sup>19</sup> inhabitants, and the towns an average of 17,689 (Koprić, 2013, p. 7). The number of persons employed in local administrative bodies in municipalities is 4,018, as opposed to 6,385 in towns, and 2,741 in the City of Zagreb (Franić, 2012, p. 2). This means that local units have an average of 9 servants in municipalities and 70 in towns (50 if the City of Zagreb is excluded), which means that Croatian local units are small. The average number of persons employed in the county administration is 103.8 (based on Franić, 2012, p. 2).

Their financial capacity is small, too. Namely, Croatia is a highly centralised country and the share of local government in general government spending amounts to only 19.1%, or 7% of GDP (Jurlina Alibegović, 2012, pp. 34-35). The majority of local government spending is done by the City of Zagreb and the towns, while the counties and municipalities

<sup>18</sup>One of the arguments for the creation of bigger local units is that they will have more inhabitants (tax payers), and as a consequence, more resources (Ivanišević, 2006, p. 215; Koprić et al., 2014, p. 268).

<sup>19</sup>[http://www.dzs.hr/Hrv/censuses/census2011/results/htm/H02\\_04/H02\\_04.html](http://www.dzs.hr/Hrv/censuses/census2011/results/htm/H02_04/H02_04.html)

account for just 1% of the expenses in the GDP (Ministry of Finance in Jambrač, 2013, p. 115).

Presently, the organisation of the Croatian system of local self-government is often criticised by the academic community, which advocates a reduction in the number of counties and local units, together with strong decentralisation (Koprić, 2010, pp. 133-135; Đulabić, 2013, pp. 195-198). This paper attempts to participate in this debate and to assess whether the territorial restructuring of local self-government would stimulate improved performance and quality measurement, which could lead to performance and quality management and thus to overall organisational improvement.<sup>20</sup>

## 4. Empirical Research

### 4.1. Methodology

In order to test the hypothesis, empirical research was conducted within the Croatian public administration. A questionnaire was sent to three types of central state organisations: all ministries (20), other central state administrative bodies (34), and central level agencies (76), as well as three types of local level organisations: counties (20), all towns and municipalities with a population over 10,000 inhabitants (74), and regional and local development agencies (29). The questionnaires were sent out between April and June 2014, in three rounds (in the first and third round as an online questionnaire and in the second round by regular post) to the heads of the organisations, asking them to fill out the questionnaire or to delegate this task to the person who is in charge of the performance measurement system in their organisation.

The questionnaire contained ten pages, but here only questions relating to the measurement of specific performance and quality dimensions, and organisational size will be discussed. In order to assess whether local units measure outputs, outcomes, efficiency, and cost-effectiveness, the respondents were asked to indicate the extent to which their organisations

---

<sup>20</sup> As has been said earlier, the pure act of performance measurement is not sufficient to stimulate performance improvement; however, measurement is one component which leads to performance management, which in turn has the potential to increase overall organisational performance (s. chapter 2.2.).

measure these performance dimensions.<sup>21</sup> They were also asked to indicate a typical output/outcome/efficiency/cost-effectiveness indicator and a typical document in which indicators can be found.

In order to assess the degree to which the organisation measures quality, seven questions were asked. The respondents were asked to indicate the extent to which their organisations measure timeliness and citizen satisfaction.<sup>22</sup> In order to assess whether they measure the number of complaints received, the use of ISO standards, BSC, CAF, or participation in quality awards, they were asked to indicate if these instruments are present in their organisation.<sup>23</sup>

The respondents were asked to indicate the total budget of their organisation for 2013 and the total number of persons employed both permanently and on short-term contracts. These answers were used as an indication of organisational size.

The received data were analysed by methods of data inspection and descriptive statistics (mainly cross-tabulation and correlations), using the Statistical Package for the Social Sciences 20.0 (SPSS) and MS Excel.

Following the data analysis, additional 12 semi-structured interviews with the heads of the organisations or civil servants responsible for the performance or quality measurement were conducted.

## 4.2. Results

The total response rate to the questionnaire was 39.5% (100 responses) and the distribution was even between the groups of organisations, which makes data analysis possible (Figure 1).

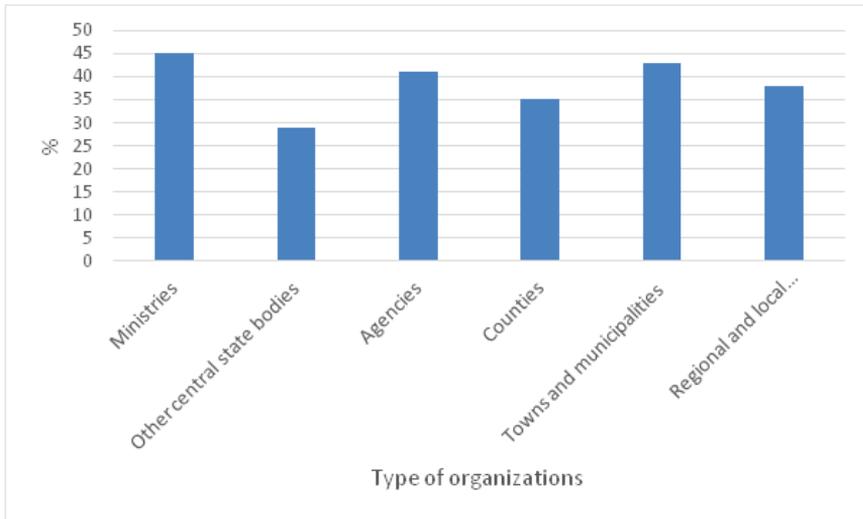
---

<sup>21</sup>The coding was done in the following way: 0= never/ 1= sporadically (just for some activities)/ 2= to a great extent (for the majority of activities)/ 3= systematically (for all activities). The respondents were also offered the “I don’t know” option.

<sup>22</sup>In this case ordinal variables were used and the coding was done in the following way: 0= never/ 1= sporadically (just for some activities)/ 2= to a great extent (for the majority of activities)/ 3= systematically (for all activities). The respondents were also offered the “I don’t know” option.

<sup>23</sup>The coding was “1=yes” or “0=no”. The respondents were also offered the “I don’t know” option.

Figure 1: Response distribution



Source: Author's own

Regarding the measurement of the four performance dimensions, it can be seen that performance measurement is not highly implemented in the Croatian public administration. Only outputs are measured to a great extent or systematically by more than 50% of the organisations which responded to the questionnaire, while other performance dimensions are measured to a considerably lower extent (Table 1).<sup>24</sup>

<sup>24</sup>The low level of adoption of performance measurement is confirmed in earlier and later research. Dražić Lutitsky et al. (2012) examined the use of managerial accounting in the Croatian public sector by sending a questionnaire to 150 public organisations in 2006 and again in 2011. The results showed that in 2006 only 8.13% of the organisations carried out performance measurement of programs, while in 2011 this percentage had decreased to a mere 4%. Although at the beginning of 2011 Croatia had established a new governmental accounting system based on the accrual accounting principle (Jovanović, 2015, p. 804), the research data showed (Dražić Lutitsky et al., 2012, p. 426) that accrual accounting had not been fully implemented and 91% of the respondents both in 2006 and 2011 asserted that the shift to full accrual accounting would contribute to the improvement of planning, accounting, and cost control. Recently, Bajo and Jurinec (2016) examined the state of performance budgeting at the local level in Croatia, concluding that although there are some tendencies towards its introduction, it is still not being implemented, and testifying that none of the 121 Croatian towns use outcomes indicators in their strategic plans.

Table 1: Performance dimension measurement

Performance dimension	Outputs	Outcome	Efficiency	Cost-effectiveness
Mean	1.737	1.411	1.185	0.832
Median	2	1	1	1
St. deviation	0.910	0.995	0.960	0.980
Number of answers				
Never	12	19	26	43
Sporadically	21	34	34	25
To a great extent	47	26	24	15
Systematically	19	16	9	7
%				
Never	12.121	20.000	27.957	47.778
Sporadically	21.212	35.789	36.559	27.778
To a great extent	47.475	27.368	25.806	16.667
Systematically	19.192	16.842	9.677	7.778

Source: Author's own

As has previously been said, quality measurement is examined taking into consideration seven elements: measurement of the speed of service delivery, measurement of citizen satisfaction, measurement of the number of complaints about the behaviour of civil servants, and the use of four quality improvement instruments. Table 2 shows that none of the quality dimensions are measured to a great extent. The only dimension that is measured by more than 50% of the organisations is the number of complaints about the behaviour of civil servants. BSC and especially CAF are practically non-existent in the Croatian public administration, although it is necessary to emphasise that BSC is used by four big organisations.

Table 2: Quality measurement

Quality dimension	Timeliness (speed)	Citizen satisfaction
Mean	1.042	1.250
Median	1	1
St. deviation	0.962	1.005
Number of answers		
Never	34	27
Sporadically	30	33

To a great extent	26	24
Systematically	7	13
%		
Never	35.052	27.835
Sporadically	30.928	34.021
To a great extent	26.804	24.742
Systematically	7.216	13.402

	Answer	Number	%
Complaints	No	40	42.553
	Yes	54	57.447
ISO standards	No	73	77.66
	Yes	21	22.34
Balanced scorecard (BSC)	No	90	95.74
	Yes	4	4.25
Quality improvement awards	No	82	89.13
	Yes	10	10.87
Common Assessment Framework (CAF)	No	92	98.9
	Yes	1	1.1

Source: Author's own

If the coding explained in footnote 21 is taken into consideration,<sup>25</sup> the organisations are divided into four groups: those which do not measure performance at all (0 points), those which measure it sporadically (1-4 points), those which measure it to a great extent (5-8 points), and those which measure it systematically (9-12 points). Table 3 shows that the average number of persons employed in an organisation tends to rise when the level of performance measurement increases (when the biggest organisation is excluded, because its size is considerably bigger than the average). However, budget size does not seem to increase as the level of performance measurement grows. It is interesting to note that the average number of persons employed in organisations which do not measure performance is 50, which is also the average number of persons employed

<sup>25</sup>The organisation obtains three points for every performance dimension that is measured systematically, 2 points for every dimension that is measured to a great extent, 1 point for every dimension that is measured sporadically, and 0 points when no measurement exists, which may amount to a total of 12 points.

in Croatian towns when the capital city is excluded, while the average number of persons employed in municipalities is only 9.

Table 3: Performance measurement level

Level of measurement / size	No performance measurement	Sporadically	To a great extent	Systematically
Average number of persons employed	50	174	801 (186)*	446
Average budget	72,066,168	309,556,404	212,429,309	649,538,546 (55,042,828)**

\*without the organisation with the greatest number of persons employed

\*\*without the organisation with the biggest budget

Source: Author's own

The same can be done for quality measurement, meaning that the organisations can be divided into four groups: those which do not measure quality at all (0 points), those which measure it sporadically (1-4 points), those which measure it to a great extent (5-8 points), and those which measure it systematically (9-11 points).<sup>26</sup> However, this is not very useful for purposes of analysis, because 76% of the organisations either do not measure quality or do this sporadically. Just one organisation (1%) measures quality systematically (Table 4).

Table 4: Extent of quality measurement

Extent of quality measurement	No quality measurement	Sporadically	To a great extent	Systematically
Number of organisations	14 (14%)	62 (62%)	23 (23%)	1(1%)

Source: Author's own

<sup>26</sup>The organisation obtains three points if it measures speed systematically, 2 points if speed is measured to a great extent, 1 if it is measured sporadically, and 0 if this component of quality is not measured at all. The same applies to satisfaction measurement. The organisation receives one point if it measures the number of complaints and one point for each quality improvement instrument, which may amount to total of 11 points.

In order to test the hypothesis, statistical correlation tests were conducted. The tests show that the correlation between organisational size and the measurement of the four performance dimensions is not statistically significant. It is also so low that it is difficult to speak of any sort of actual correlation, whether positive or negative (Table 5).

Table 5: Correlation between size and performance dimensions

Size / Performance dimensions	Output	Outcome	Efficiency	Cost-effectiveness
Total number of persons employed	.108	.139	.043	.094
Budget	-.015	-.025	-.035	-.024

Legend: \* correlation significant with  $p < 0.05$  (2-tailed); \*\* correlation significant with  $p < 0.01$  (2-tailed) (Spearman correlation coefficient test)

Source: Author's own

When the correlation test is performed solely for quality measurement, similar results can be obtained. However, in this case the results show that the correlation between organisational size and the use of two quality improvement instruments, BSC and ISO standards, is positive and this correlation is statistically significant. Although BSC is actually used by only four organisations, the data show that these are the biggest organisations in terms of the budget, which allows us to conclude that an organisation's financial size and capacity is a determinant of the use of BSC. Also, results show that size statistically positively correlates with the measurement of the number of complaints about civil servant behaviour, which means that personnel size of an organisation is important for some quality measurement elements (Table 6).

Table 6: Correlation between size and quality measurement

Quality indicator / Size	Total number of persons employed	Budget
Speed <sup>o</sup>	.087	.109
Satisfaction <sup>o</sup>	-.046	.005
Complaints <sup>oo</sup>	.258**	.124
ISO <sup>oo</sup>	.212*	.313**
BSC <sup>oo</sup>	.033	.254**

Quality awards <sup>oo</sup>	-.047	-.068
CAF <sup>oo</sup>	.034	-.029

Legend: \* correlation significant with  $p < 0.05$  (2-tailed); \*\* correlation significant with  $p < 0.01$  (2-tailed)

<sup>o</sup> Spearman correlation coefficient test, <sup>oo</sup> point biserial coefficient correlation test

Source: Author's own

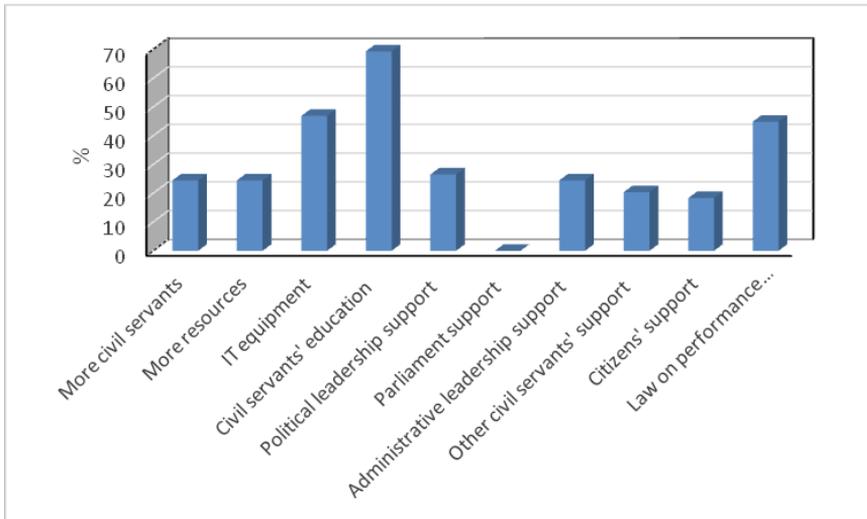
These data show that the two hypotheses stated earlier on cannot be considered confirmed because for the most part the correlations are not statistically significant. However, there are indications that size is important for quality measurement. Also, because budget size is important for the use of BSC, which is also a performance measurement tool, this is an indication that size can be important for performance measurement, too.

In order to further examine these findings, additional semi-structured interviews were conducted. The interviews were conducted both in organisations with fewer than 50 persons employed, which has proved to be the average size of organisations which do not measure performance at all, and in bigger organisations. Interestingly, respondents in the smaller organisations stated their size as one of the main reasons why there is little or no measurement. Namely, they said that *"we function well; we are small and we can keep track of our work"*, and they said they did not need measurement because *"we are small; we see each other every day"*. On the other hand, bigger organisations did not state size as a reason for either implementing performance and quality measurement or not doing so.

This could be an indication that size is an important factor for the introduction of performance and quality measurement. Small organisations will not be inclined to measure, but the increase in size (seen as the number of persons employed) will lead to at least some measurement, although further increase in size does not correlate with measurement expansion.

In order to further examine these findings, it is possible to look at the data the respondents from local level organisations gave in response to the question about incentives for performance measurement. Namely, this group of respondents indicated that the main incentives for performance measurement are civil servant education and better IT equipment. Size, as an increase in the number of civil servants and the budget, is indicated only in approximately 20% of cases (Figure 2).

Figure 2: Incentives for performance measurement at the local level



Source: Author's own

### 4.3. Discussion

At first glance, these results indicate that under Croatian circumstances organisational size is not a contributing factor to quality and in particular to performance measurement, which is not in accordance with previous research. Nevertheless, four considerations need to be taken into account.

First, Croatia is completely new to performance and quality measurement. The introduction of managerial instruments which could stimulate performance measurement, such as strategic planning, was only implemented at the central state level in 2010. At the local level, since 2010 counties have had the obligation to enact their county development strategy. Although these strategies have been enacted, the problem is that there is no monitoring of their execution (EIZ, 2012: 55), meaning there is no systematic performance measurement. As for municipalities and towns, there is no legal obligation to implement a comprehensive performance measurement system. Looking at quality measurement alone, there is no general law requiring the introduction of these instruments.

The results obtained in this research might point to the fact that in the initial stages of performance and quality measurement implementation size is not one of the basic determinants, but other factors, such as political

and administrative leadership support, might have a stronger influence on the level of implementation. Only in later stages, when performance and quality measurement has been widely accepted and implemented, may size acquire a greater significance.<sup>27</sup>

This is an important contribution because Simon, Smithburg, and Thompson (1950, p. 8 in Denhardt, 1993, p. 82) indicate that “in actual administration, there is often a greater difference between small and large organisations than there is between public and private ones”. These results point to the fact that in the initial phases of performance and quality measurement size should not be seen as the main difference between organisations.

Second, the fact that size has not shown to statistically significantly positively correlate with the measurement of a great number of performance dimensions would not be problematic, if the overall level of performance measurement in Croatia were adequately high. However, it is really low. Apart from the outputs, other performance dimensions are neglected. As for quality measurement, this is the area in which 76% of the organisations achieved the lowest score. The research has shown that organisations which do not measure performance at all have an average of 50 persons employed, and this is exactly the average number of persons employed in Croatian towns, while the number of persons employed in municipalities is much smaller.

Interviews point to the fact that organisations need to have a certain size in order to start implementing this instrument. Because the majority of Croatian local units are small, they do not fulfil this basic condition and are not able to stimulate performance and quality measurement. According to OECD (2008, p. 212) “experience in different OECD countries suggests that performance indicators contribute to enhancing the efficiency and effectiveness of sub-national service delivery by sharing information across levels of government and thus accelerating the diffusion of best practices”. Thus local self-government reform that would enhance local capacities (such as territorial amalgamation which could allow the creation of stronger local units in terms of personnel and material power) could allow local units to experiment with new managerial instruments, in

---

<sup>27</sup> It should be also taken into consideration that the QIIs examined in this research are complex, while easier ones (for example citizen charters or user panels) were not examined, so the results on quality measurement should be confined only to these complex QIIs.

this case with quality and performance measurement, and consequently to increase overall performance.

Third, there is an indication that size is important. Namely, when looking at the incentives for performance measurement expressed by local level respondents, better education and IT equipment are the two most important ones. It is logical to suppose that an organisation with a bigger budget will be able to devote part of that budget to civil servant training and equipment acquisition, which consequently means that size is important. Fourth, there is evidence that size is an important factor for the measurement of the number of complaints about civil servant behaviour, the use of ISO standards, and the use of BSC. When the actual number of organisations using these instruments was checked, only four turned out to be using BSC, but these are big organisations, which indicates that size could stimulate the implementation of BSC.

Looking at the whole picture, it can be concluded that organisational size has some influence on performance and quality measurement in the Croatian public administration, although it is obvious that it is not the basic determinant.

## 5. Conclusion

Overall, the results presented here and their examination permit some theoretical conclusions and practical suggestions for the Croatian system of local self-government.

In its theoretical aspect this paper contributes to the overall knowledge on performance and quality measurement in ex-socialist countries, showing clearly that Croatia is lagging behind in the use of these managerial instruments. The results show that size is not a basic determinant of performance and quality measurement, which means that attention should be devoted to other factors, and both big and small organisations need equal help in order to establish the appropriate performance and quality measurement systems. However, the results show that size is important for the measurement of some quality dimensions and especially that budgetary size has a role in stimulating the use of BSC.

As for practical suggestions for local units in Croatia, the paper has shown that the overall level of performance and quality measurement is low and needs to be increased. The majority of local units are small, which prevents them from further developing these instruments, and this could in-

dicate that the reform of the local self-government system is necessary. Most importantly, the research has shown there are some factors which could stimulate performance and quality measurement. In this respect, special attention should be devoted to civil servant education in the implementation of performance and quality measurement, which is a basic prerequisite for any successful implementation. As there is no general law or general requirement for performance and quality measurement at the local level, there is a lack of general guidance on how performance and quality measurement should be conducted. This guidance is necessary; it can be developed by the responsible ministry, or better yet, by the associations of local units, and its existence would certainly stimulate the measurement process and make it more accessible and comprehensive. Furthermore, the data have shown that local units lack the necessary technical equipment for performance measurement, so software specially designed for quality and overall performance measurement should be acquired. Also, because the level of implementation of QIIs is decisively too low, local units should be made aware of their existence and benefits that their use can result in.

The intention of this paper is to give an overview of the performance and quality measurement process in Croatia. However, the paper presents some limitations. First of all, the conclusions are based on a questionnaire response rate of only 40%. Nevertheless, the distribution of the overall response rate is representative and it can be considered to give a representative sample and at least a partial orientation of the state of affairs in this respect. Also, some correlations, whether positive or negative, are weak, which makes it harder to formulate a final conclusion. However, as Croatia is still new in the implementation of these instruments, calculations were performed in accordance with the current Croatian situation.

This paper opens up space for further research. In the first place it would be necessary to examine whether organisational size has an influence on the use of performance information and on overall performance improvement. Namely, performance, as well as quality measurement, is justified only if the information obtained through the measurement process is actually implemented and overall performance is increased. Presently, there is research that shows that the use of performance information (performance management) increases overall organisational performance (Walker et al., 2011; McGuire & Gerrish, 2015), but these assumptions should also be tested in the Croatian context and they would provide more solid evidence of whether an increase in the size of local units would increase overall performance.

## References

- Ammons, D. (2008). Performance measurement and benchmarking in local government. In E. M. Berman (Ed.), *Encyclopaedia of Public Administration and Public Policy (2nd ed.)*. (pp. 1455-1458). Boca Raton, FL: CRC Press, Taylor & Francis Group.
- Ammons, D. N., & Rivenbark, W. C. (2008). Factors influencing the use of performance data to improve municipal services: Evidence from the North Carolina Benchmarking Project. *Public Administration Review*, March/April 2008, 304-318.
- Bajo, A., & Jurinec, D. (2016). Uvođenje lokalnih proračuna po rezultatima: Europska iskustva i stanje u Hrvatskoj [Introduction of performance-based budgeting: European experiences and the situation in Croatia]. In I. Koprić, J. Džinić, & R. Manojlović (Eds.), *Upravljanje kvalitetom i učinkovitošću u javnoj upravi* [Performance and Quality Management in Public Administration]. (pp. 233-258). Zagreb, Croatia: Institut za javnu upravu.
- Behn, R. D. (2002). The psychological barriers to performance management: Or why isn't everyone jumping on the performance-management bandwagon? *Public Performance & Management Review*, 26(1), 5-25.
- Behn, R. D. (2003). Why measure performance? Different purposes require different measures. *Public Administration Review* 63(5), 586-606.
- Berman, E. & Wang, X. (2000). Performance measurement in U.S. counties: Capacity for reform. *Public Administration Review* 60(5), 409-420.
- Bouckaert, G. & Balk, W. (1991). Public productivity measurement: Diseases and cures. *Public Productivity & Management Review* 15(2), 229-235.
- Bouckaert, G. & Halligan, J. (2008). *Managing performance: International comparisons*. New York, NY: Routledge, Taylor & Francis Group.
- Carter, N. (1991). Learning to measure performance: The use of indicators in organisations. *Public Administration* 69(1), 85-101.
- De Brujin, H. (2007). *Managing performance in the public sector*. New York, NY: Routledge.
- De Lancer Julnes, P. (2008). Performance measurement. In E. M. Berman (Ed.), *Encyclopaedia of Public Administration and Public Policy (2nd ed.)*. (pp. 1450-1454). Boca Raton, FL: CRC Press, Taylor & Francis Group.
- De Lancer Julnes, P. (2011). Performance measurement beyond instrumental use. In W. Van Dooren, & S. Van de Walle (Eds.), *Performance Information in the Public Sector: How it is Used* (pp. 62-75). Houndmills, UK: Palgrave Macmillan.
- De Lancer Julnes, P. & Holzer, M. (2001). Promoting the utilisation of performance measures in public organisations: An empirical study of factors affecting adoption and implementation. *Public Administration Review*, 61(6), 693-708.
- Denhardt, R. B. (1993). *Theories of Public Organisation*. San Diego, CA: Harcourt Brace & Company.

- Dražić Lutilsky, I., Vašiček, V., & Vašiček, D. (2012). Cost planning and control in the Croatian public sector. *Economic Research – Ekonomska istraživanja*, 25(2), 413-434.
- Drechsler, W., & Kattel, R. (2008). Towards the Neo-Weberian State? Perhaps, but certainly adieu, NPM. *The NISPAACE Journal of Public Administration and Policy. Special Issue: A Distinctive European Model? The Neo-Weberian State* 1(2), 95-99.
- Đulabić, V. (2013). Položaj županija u statističkoj i političkog regionalizaciji Hrvatske [The position of counties in the statistical and political regionalisation of Croatia]. In I. Koprić, & V. Đulabić (Eds.), *Dvadeset godina lokalne samouprave u Hrvatskoj* [Twenty Years of Local Self-Government in Croatia] (pp. 183-200). Zagreb, Croatia: Institut za javnu upravu.
- Džinić, J. (2012). Nagrade u javnom sektoru: podizanje kvalitete kroz natjecanje i suradnju? [Awards in the public sector: Quality increase through competition and collaboration?] *Hrvatska i komparativna javna uprava-Croatian and Comparative Public Administration*, 12(4), 1003-1037.
- Džinić, J. (2014). *Utjecaj instrumenata unapređenja kvalitete na organizacijsko učenje u upravnim organizacijama* [The influence of quality improvement instruments on organisational learning in administrative organisations]. Doctoral dissertation at the Faculty of Law, University of Zagreb.
- EIZ (2012). *Studija o ocjeni sustava strateškog planiranja i mogućnosti financiranja razvoja županija i lokalnih jedinica u kontekstu provođenja politike regionalnog razvoja Republike Hrvatske* [A study of the system of strategic planning and the opportunity for the financial development of counties and local units in the context of Croatian policy of regional development]. Zagreb, Croatia: Ekonomski institut and Ministarstvo regionalnog razvoja i fondova Europske unije.
- Folz, D., Reem Abdelrazek H., & Chung Y. (2009). The adoption, use, and impacts of performance measures in medium-size cities: Progress toward performance management. *Public Performance & Management Review*, 33(1), 63-87.
- Franić, J. (2012). Zapošljavanje na lokalnoj razini u Republici Hrvatskoj tijekom gospodarske krize [Employment at the local level in Croatia during the economic crisis]. *Newsletter Instituta za javne financije br. 71* [Institute of Public Finance Newsletter n. 71].
- Hammerschmid, G., Van de Walle S., & Štimac S. (2013). Internal and external use of performance information in public organisations: Results from an international survey. *Public Money & Management*, July 2013, 1-8.
- Heinrich, C. (2007). Measuring public sector performance and effectiveness. In G. B. Peters, & J. Pierre, (Ed.), *Handbook of Public Administration* (pp. 24-36). London, UK: SAGE Publications Ltd.
- Hatry, H. P. (2006). *Performance measurement: Getting results*. Washington, DC: The Urban Institute Press.
- Ivanišević, S. (2006). Teritorijalna osnova lokalne samouprave [Territorial basis of local self-government]. In I. Koprić (Ed.), *Javna uprava – nastavni materijali* [Public Administration: Teaching Materials] (pp. 193-224). Zagreb, Croatia: Društveno veleučilište i Pravni fakultet.

- Jambrač, J. (2013). Lokalna država i konkurentnost [The local state and competitiveness]. In I. Koprić, & V. Đulabić (Eds.), *Dvadeset godina lokalne samouprave u Hrvatskoj* [Twenty Years of Local Self-Government in Croatia] (pp. 101-126). Zagreb, Croatia: Institut za javnu upravu.
- Jovanović, T. (2015). Public sector accounting in Slovenia and Croatia. *Hrvatska i komparativna javna uprava – Croatian and Comparative Public Administration*, 15(4), 791–814.
- Jurlina Alibegović, D. (2012). Fiskalna decentralizacija u Hrvatskoj: između želja i mogućnosti [Fiscal decentralisation in Croatia: Between wishes and reality]. In N. Zakošek (Ed.), 1. *Forum za javnu upravu* [1. Forum for Public Administration] (pp. 29-54). Zagreb, Croatia: Friedrich Ebert Stiftung/Institut za javnu upravu.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating strategy into action*. Cambridge, MA: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2001). *The strategy-focused organisation*. Cambridge, MA: Harvard Business School Press.
- Ketelaar, A., Mannin, N., & Turkisch, E. (2007). *Performance-based arrangements for senior civil servants OECD and other country experiences*. OECD Working Papers on Public Governance, 2007/5. Paris, France: OECD Publishing.
- Kimberly, J. R. (1976). Organisational size and the structuralist perspective: A review, critique, and proposal. *Administrative Science Quarterly*, 21(4), 571-597.
- Kloviene, R., & Valanciene, L. (2013). Performance measurement model formation in municipalities. *Economics and Management*, 18(3), 383-393.
- Koprić, I. (2006). Reforma javne uprave u Hrvatskoj: okviri, iskustva i perspektive [Reform of public administration in Croatia: Frameworks, experiences, and perspectives]. In I. Koprić (Ed.), *Javna uprava – nastavni materijali* (pp. 347-360) [Public Administration – Teaching Materials]. Zagreb, Croatia: Društveno veleučilište i Pravni fakultet.
- Koprić, I. (2010). Teritorijalna organizacija Hrvatske: stanje, kriteriji za prosudbu racionalnosti i prijedlog novog sustava [Territorial organisation of Croatia: Present state, criteria for assessing the rationality and suggestions for reform]. In J. Barbić (Ed.), *Nova hrvatska lokalna i regionalna samouprava* [New Croatian Local and Regional Self-Government] (pp. 109-145). Zagreb, Croatia: HAZU.
- Koprić, I. (2013). Dvadeset godina lokalne i područne (regionalne) samouprave u Hrvatskoj: razvoj, stanje i perspektive (Twenty years of local and regional self-government in Croatia: Development, present state, and perspectives). In I. Koprić (Ed.), *Lokalna samouprava i lokalni izbori* [Local Self-Government and Local Elections] (pp. 3-63). Zagreb, Croatia: Institut za javnu upravu.
- Koprić, I., & Marčetić, G. (2000). Kriza socijalne države, reforme javne uprave i hrvatsko upravno osoblje [Crisis of the social state, public administration reforms, and Croatian administrative personnel]. *Hrvatska javna uprava*, 2(1), 25-82.
- Koprić, I., Musa, A., & Lalić Novak, G. (2012). *Europski upravni prostor* [European administrative space]. Zagreb, Croatia: Institut za javnu upravu.
- Koprić, I., Marčetić, G., Musa, A., Đulabić, V., & Lalić Novak, G. (2014). *Upravna znanost: Javna uprava u suvremenom europskom kontekstu* [Administrative

- Science: Public administration in the contemporary European context]. Zagreb, Croatia: Pravni fakultet Sveučilišta u Zagrebu, Studijski centar za javnu upravu i javne financije.
- Löffler, E. (2004). *Defining quality in public administration*. Paper presented at the NISPACee Conference, Riga, 10-13 May 2004.
- Manojlović, R. (2014). *Utjecaj odabranih organizacijskih varijabli na mjerenje učinka upravnih organizacija* [The influence of selected organisational variables on performance measurement of public organisations]. Doctoral dissertation at the Faculty of Law, University of Zagreb.
- McGuire, M., & Gerrish, E. (2015). The impact of performance management on performance in public organisations: A meta-analysis. *Public Administration Review*, 76(1), 48–66.
- Melker, J. (2006). On the road to improved performance: Changing organisational communication through performance management. *Public Performance & Management Review*, 30(1), 73-95.
- Moulin, M. (2002). *Delivering excellence in health and social care*. Buckingham, UK: Open University Press.
- NISPACee (2008/2009). *The NISPACee Journal of Public Administration and Policy. Special Issue: A Distinctive European Model? The Neo-Weberian State* 1(2).
- Nomm, K., & Randma-Liiv, T. (2012). Performance measurement and performance information in new Democracies: A study of the Estonian central government. *Public Management Review*, 14(7), 859–879.
- OECD (2008). Public administration reform: Improving the performance of the public sector. In: *Reforms for Stability and Sustainable Growth: An OECD Perspective on Hungary* (pp. 205-221). Paris, France: OECD Publishing. doi: 10.1787/9789264043770-11-en.
- OECD (2015). *How's life? 2015: Measuring well-being*. Paris, France: OECD Publishing, doi: 10.1787/how\_life-2015-en.
- Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Reading, MA: Addison-Wesley Publishing Company.
- Pfeffer, J., & Sutton, R. I. (2006). Evidence-based management. *Harvard Business Review*, January 2006, 2-13, <https://hbr.org/2006/01/evidence-based-management>
- Pollitt, C., & Bouckaert, G. (2011). *Public management reform: A comparative analysis – New public management, governance, and the Neo-Weberian State*. New York, NY: Oxford University Press.
- Puljiz, V. (1999). Pogledi i djelovanje u socijalnoj politici Nikole Škrleca Lomničkog [Views and actions in the social policy of Nikola Škrlec Lomnički]. *Revija za socijalnu politiku*, 6(3-4), 299-305.
- Pusić, E. (2002). *Nauka o upravi* [The science of administration]. Zagreb, Croatia: Školska knjiga.
- Radnor, Z. (2010). Hitting the target and missing the point? Developing and understanding of organisational gaming. In W. Van Dooren, & S. Van de Walle

- (Eds.), *Performance Information in the Public Sector: How it is Used* (pp. 98-109). Houndmills, UK: Palgrave Macmillan.
- Röhn, O., Gönenç, R., Beer, C., & Boarini, R. (2013). Austria's well-being goes beyond GDP. *OECD Economics Department Working Papers*, No. 1079. Paris, France: OECD Publishing, doi: 10.1787/5k422133hjnv-en.
- Salazar, J. I., & Lopez de Arkos Martinez, C. G. (2013). Adoption of performance measurement: Evidence of Mexican municipalities. *International Journal of Public Administration*, 36(11), 754-767.
- Sanger, M. B. (2008). From measurement to management: Breaking through the barriers to state and local performance. *Public Administration Review*, December 2008, *Special Issue*, 70-85.
- Setnikar Cankar, S. (2006). Transition countries and new public management: The case of Slovenia. *International Business & Economics Research Journal*, 5(8), 45-54.
- Siegel, J. P., & Summermatter, L. (2008). *Defining performance in public management: A survey of academic journals*. Paper presented at the EGPA Conference Rotterdam, Netherlands, 3rd September 2008.
- Talbot, C. (2010). *Theories of performance: Organisational and service improvement in the public domain*. Oxford, UK: Oxford University Press.
- Tampieri, L. (2005). Performance evaluation indexes in public administration: Some issues of their actual usefulness. *Uprava*, 3(2), 59-82.
- Van Dooren, W. (2005). What makes organisations measure? Hypotheses on the causes and conditions for performance measurement. *Financial Accountability & Management*, 21(3), 363-383.
- Van Dooren, W. (2006). *Performance measurement in the Flemish public sector: A supply and demand approach*. Doctoral dissertation. Katholieke Universiteit Leuven, <http://soc.kuleuven.be/io/english/research/publication/performance-measurement-in-the-flemish-public-sector-a-supply-and-demand-approach>
- Van Dooren, W., Bouckaert, G., & Halligan, J. (2010). *Performance management in the public sector*. London, UK, New York, NY: Routledge, Taylor & Francis Group.
- Van Thiel, S., & Leeuw, F. L. (2002). The performance paradox in the public sector. *Public Performance & Management Review*, 25(3), 267-281.
- Walker, R. M., & Damanpour, F., & Devece, C. A. (2011). Management innovation and organisational performance: The mediating effect of performance management. *Journal of Public Administration Research and Theory*, 21(2), 367-386.
- Wang, X., & Berman, E. (2001). Performance measurement in counties: Findings from a survey. *Journal of Public Administration Research and Theory: J-PART*, 11(3), 403-427.
- Yang, K., & Hseih, J. I. (2007). Managerial effectiveness of government performance measurement: Testing a middle-range model. *Public Administration Review*, 67(5), 861-879.

## ORGANIZATIONAL SIZE AS A DETERMINING FACTOR OF PERFORMANCE AND QUALITY MEASUREMENT: LESSONS FOR THE CROATIAN LOCAL SELF-GOVERNMENT

### *Summary*

*Performance measurement is a managerial instrument used with the purpose of collecting information on different performance dimensions, which can be used for a variety of purposes. Apart from performance, public sector organisations need to devote their attention to the quality of services provided. The problem with quality in the public sector is that it is hard to define and to measure. In this paper quality measurement is defined as the measurement of citizen satisfaction with the services provided, the speed at which the services have been delivered, the attitude of public servants toward the citizens, and the use of some quality improvement instruments. The paper investigates whether organisational size, defined as number of persons employed and the total budget, has any effect on the performance and quality measurement present in a certain organisation. The results are used to formulate suggestions about local self-government reform in Croatia and for the improvement of performance and quality measurement therein. In order to formulate the conclusions, results from the empirical research conducted within the central and local government in Croatia in 2014 are presented.*

*Keywords: performance measurement, quality measurement, organisation size, Croatia*

## VELIČINA ORGANIZACIJE KAO JEDAN OD ODLUČUJUĆIH ČIMBENIKA MJERENJA REZULTATA I KVALITETE – ŠTO MOŽE NAUČITI HRVATSKA LOKALNA SAMOUPRAVA

### Sažetak

Mjerenje rezultata ubraja se među upravljačke instrumente koji služe u svrhu prikupljanja podataka o različitim tipovima rezultata koje pojedina organizacija postiže. Ti podatci imaju različite namjene. Organizacije u javnom sektoru moraju voditi računa ne samo o rezultatima, već i o kvaliteti javnih službi. U javnom sektoru nije lako definirati i izmjeriti pojam kvalitete. U radu se mjerenje kvalitete definira kao mjerenje zadovoljstva građana s javnim službama, mjerenje brzine djelovanja javnih službi, odnos javnih službenika prema građanima kao i primjena određenih instrumenata za poboljšanje kvalitete. Istražuje se utječe li veličina organizacije, određena brojem zaposlenih i ukupnim budžetom, na mjerenje rezultata i kvalitete u pojedinim organizacijama. Obradom rezultata formuliraju se prijedlozi o reformi lokalne samouprave u Hrvatskoj, kao i o poboljšanju mjerenja rezultata i kvalitete lokalne samouprave. Zaključci se formiraju na temelju rezultata empirijskog istraživanja provedenog na središnjoj i lokalnoj razini 2014. godine.

Ključne riječi: mjerenje rezultata, mjerenje kvalitete, veličina organizacije, Hrvatska