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**Measuring the Performance of Local Government Entities and
Analysis of their Managers' and Personnel's Information Needs
in the Context of *New Public Management***

Abstract

Ways to make the public sector more effective and efficient have been vigorously discussed for more than thirty years by practitioners and researchers all over the world. Public sector reforms drawing on the paradigm of an entrepreneurial and market style of management are called New Public Management (NPM). However if the concept of managing public sector entities according to the best management practices in the private sector is to be implemented and used effectively, the necessary management-aid tools must be introduced. This particularly applies to the public sector's accounting system oriented to external reporting, to which needs to be added a management accounting subsystem with cost accounting and budgeting based on responsibility accounting and a measurement, evaluation, and performance reporting subsystem.

The main research objectives of this article are the following:

- *to identify the management accounting methods and tools currently used by the managers of sampled local government entities (LGEs);*
- *to identify the information needs of the LGEs' managers and personnel related to the implementation and application of a management accounting system, and to find out what accounting methods and tools they would like to have at their disposal to improve management processes;*

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- *to evaluate the usefulness, adequacy and effectiveness of performance measurement systems used in LGEs.*

This article fits into the scope of world research on the implementations of the NPM concept and uses New Institutional Economy to better understand the implementation of management accounting in the public sector.

1. Introduction

Ways to make the public sector more effective and efficient have been vigorously discussed, for more than thirty years, by practitioners and researchers all over the world. The continually expanding public sectors and the growing crisis affecting their guiding values have caused some countries, such as the UK (1970s), the USA (1980s), New Zealand or Australia, to introduce major reforms in this area. In planning them, the operational and management rules and practices of private sector organizations were used as a benchmark. All public sector reforms drawing on the paradigm of entrepreneurial and market style management are called *New Public Management* (NPM) (Pollitt 1990; Hoggett 1991; Hood 1991; Osborne, Gaebler 1992). This approach also became popular in Canada, Sweden, the Netherlands and other western European countries, although some of them failed to follow it through (e.g. Germany, Sweden). In Europe, an important advocate of the NPM concept is the European Union, which develops laws, recommendations, and exerts other forms of institutional influence on the Member States to make their public sectors more effective and efficient.

The outset of the 21st century, when the world economy is going through recurrent crises, has been particularly rich in reports and studies on management methods and management-aid tools useful for public sector entities. The special characteristics of this sector, particularly political influences, specific allocation of resources, the use of public utility rather than economic profitability as a criterion, the mandatory obligation to provide certain services, the wide range of goals pursued by both public sector entities and their stakeholders, and the diversity of tasks and functions etc., makes public management an extremely complex issue.

If the concept of managing public sector entities according to the private sector's good management practices is to be implemented and used effectively, the necessary management-aid tools must be introduced. This particularly applies to the public sector's accounting system oriented to external reporting, to which needs to be added a management accounting subsystem with cost accounting and budgeting based on responsibility accounting and

a measurement, evaluation, and performance reporting subsystem. The last element is particularly important for ensuring that the tasks of the public sector entities as a whole and of their subdivisions are carried out with the necessary effectiveness and efficiency.

The main research objectives of this article are the following:

- to identify management accounting methods and tools currently used by the managers of the sampled local government entities (LGEs);
- to identify the information needs of the LGEs' managers and personnel related to the implementation and application of a management control system, and to find out what accounting methods and tools they would like to have at their disposal to improve management processes;
- to evaluate the usefulness, adequacy and effectiveness of performance measurement systems used in LGEs in Poland, as well as the degree of the systems' compliance with the applicable laws in the context of the assumptions concerning management control systems.

This article is one of the first articles in Poland dealing with this subject. It also fits into the scope of world research on the implementations of the NPM concept. T.Randma-Liiv (2008) argues that in Western Europe management systems of public sectors have evolved from the traditional Weberian bureaucratic model to NPM, owing to improvements made to the systems' rules and modes of operation, which drew on the management model used in the private sector. In the meantime, the Central and Eastern European countries (CEECs) were busy modifying their economic systems by replacing the central-command model with a market model. This process resulted in the complete reorganization of the rules governing and determining the functioning of their public sectors, as well as laying the foundations for development of the private sector, which western countries had relied on as a benchmark in their reformations of various public sectors. The institutional differences between the functioning and reforms of public sectors in Western Europe and CEECs brought about a situation whereby the NPM systems implemented in the public sectors of the respective regions were not fully comparable until late 1990s. The main factors explaining why the CEECs followed a different course of reforms are the following: 1) the existence of newly established, and therefore constantly evolving, private sectors; 2) the post-communist model of the public sector having to be developed from scratch; 3) the creation of principles for a democratic state and citizen's freedoms, including property rights (Randma-Liiv 2008). As the development of public sector rules in the 1990s was somewhat experimental and spontaneous (Agh 2003; Verheijen 2003), the main aim of the subsequent reforms was to remove obvious inefficiencies, with the improvement of the sector's effectiveness and efficiency having to wait its turn.

Quite naturally, the fledgling private sector in the CEECs could not serve as a benchmark for public sector reforms, particularly because citizens themselves were only starting to learn about their privileges in a democracy. For these reasons, the authors of this article focused on the NPM concept rather than the public governance concept prevailing today (Kernaghan, Marson, Borins 2000; Rudolf 2010).

2. The characteristics of New Public Management

The concept of New Public Management replaces the traditional (Weberian) bureaucratic model of managing the public administration and the public sector as a whole with an entrepreneurial model, and promotes a possibly extensive use in the public sector of management rules and models successfully employed in private businesses. It is postulated that in order to create value for citizens, public sector entities must be *effective* (to act so as to achieve their statutory objectives and fulfil stakeholders' expectations) and *efficient* (to deliver what is expected of them while consuming as few resources as possible, or to generate the highest value for their beneficiaries at a given level of resources).

Studies on New Public Management are of an interdisciplinary character. They focus on areas such as public administration, accounting, economics, and management. Applied studies and practical activities within New Public Management are mainly undertaken to transfer private sector concepts, solutions and tools (budgeting, performance measurement, risk analysis, etc.) to the public sector. The authors of this article have developed the following classification of NPM characteristics, based on those which are most frequently mentioned in the literature (Hood 1991, pp. 4,5; Polidano 1999; OECD 1995; Zawicki 2011, p. 34):

1. related to NPM culture:
 - a. emphasis on goals and the mission instead of simple compliance with the rules;
 - b. market mechanisms overriding bureaucratic mechanisms;
 - c. encouragement to public sector entities to compete;
 - d. focus on customers and on providing them with value added;
2. concerning consistency between a management system and New Public Management:
 - a. decentralization of powers down to particular entities in the public sector;
 - b. entrepreneurial style of management;
 - c. a greater role given to performance control;

- d. measurement of performance and concentration on outputs rather than inputs;
- e. transparency of standards and indicators of performance;
- f. more discipline and more economic use of resources.

According to Pollitt and Bouckaert, the transition to NPM involves changes in both structures and process (2004, p. 8).

In New Public Management, an entrepreneurial style of management and resourcefulness replaces bureaucracy in order to improve functional efficiency and effectiveness. O. E. Hughes (1994) indicates that the difference between a process of administration (bureaucracy) and an entrepreneurial approach (management) is that “administration is about following instructions, whereas management means achievement”. However, the transition of public sector entities from administration to management requires major adjustments in their performance measurement and reporting systems, as well as a shift in the control mechanisms from “passive compliance with procedures” to “active control.” An important aspect of the decentralisation of powers and of granting greater flexibility of action to public sector managers is personal accountability for effectiveness.

E. Ferlie, L. Ashburnen, L. Fitzgerald, A. Pettigrew (1996) have described public sector reforms towards NPM in terms of four models: focus on value, organizational downsizing and decentralisation of management, pursuit of excellence, and orientation to public services. The authors of this article have established that Polish reforms have the characteristics of the first model, typical of Western European reforms of the 1980s, and some of the second model.

3. Management control and management accounting in the Polish public sector

The major source of laws on management control systems in the Polish public sector is the Public Finance Act (2009). In addition to supporting management processes in public sector entities, its instruments intend to make the entities more effective and efficient, to ensure that they are focused on their goals (including the long-term goals), and to make their managers more accountable. The main instruments are management control, performance budgeting, and internal audit. For the instruments to function properly, consistently and in an integrated manner, the information needs of managers and personnel in public sector entities must be recognised and appropriate performance measurement and reporting systems implemented. This means that management accounting subsystems must be added to the existing financial accounting systems.

The management control system which was introduced into the Polish public sector in 2009 replaced the financial control system (with less stringent accountability standards) which had been in use since 1998. The new system defines management control as all measures allowing objectives and tasks to be fulfilled in a lawful, effective, economic, and timely manner (*Public Finance Act, 2009, par. 68*). The main purpose of management control is to ensure that actions comply with the relevant laws and internal procedures, to boost the effectiveness and efficiency of public sector entities, to protect resources, to streamline information and increase the reliability of reporting, and to manage risks.

In 2009, the Minister of Finance issued management control implementation and application standards for the public finance sector (*The Finance Ministry Statement no. 23, 2009*). These standards aim to ensure that the management control model is homogenous and coherent across the sector, consistent with international standards, and used to create, evaluate and improve management control systems.

The standards are grouped into five categories, each corresponding to a particular component of management control: internal environment, objectives and risk management, control mechanisms, information and communication, and monitoring and evaluation. The standards have been developed based on the COSO concept (*The Committee of Sponsoring Organizations of the Treadway Commission*).

Information and communication have been given a very special role as an element of a management control, because the respective standards require that both managers and personnel in public sector entities are provided with access to the information they need to do their work, and that the communication system in place not only distributes information, but also ensures its comprehensibility to the recipients. It is equally important that the entities have efficient information and communication systems allowing them to manage their processes. The standards address three areas related to information: current information, internal communication, and external communication.

Both managers and personnel in the public sector need to have timely access to appropriately formatted, vital, and reliable data to fulfil their goals and tasks. A public sector entity provided with information on a current basis may not only remove inefficiencies as soon as they are spotted, but also strengthen decision-making skills and the system of motivation. The structure of the information and internal communication system in a public sector entity should correspond to its setup.

With regard to external communication, its system should be configured so that the entity can efficiently exchange information with those external

institutions that may have an effect on the fulfilment of its goals and tasks. Above all, external communication must ensure that information flows between subordinate and superior organizations. It is also important for the public sector entities to be able to communicate with various external bodies, regardless of their organizational form and legal status.

The management control system must be monitored and evaluated on an on-going basis. Effective monitoring ensures a flow of information regarding the performance of the control mechanisms. Information must be available early enough to enable the identified problems to be solved as they arise and countermeasures to be applied.

The management control system enacted for the public finance sector has two levels. The basic level is public sector entities (level I). The responsibility for management control is vested in their managers. At the level of the central administration bodies and local governments, management control must be exercised by the branches of government administration and local government entities (level II).

Because management control is mandatory the manager in charge of the entity must implement effective organizational solutions and procedures and make sure that they are adhered to. At the same time, though, the manager is free to choose any solutions he or she finds suitable, including the types of indicators showing performance and achievement.

For the implementation and operation of a management control system to be successful and effective, the scope of traditional financial accounting must be extended to include some elements of management accounting, particularly those concerning budgeting, costing, and measurement and evaluation of performance. It is not possible that the managers of public sector entities can make decisions and manage them efficiently without access to the same information that businesses obtain from their management accounting systems.

4. An overview of empirical studies on management accounting in the public sector

Management accounting tools and methods used in the public sector have been studied on many occasions all over the world, because management accounting supports public entity management, provides their managers with decision-making information, and allows public funds to be spent effectively and economically.

Studies usually concentrate on performance measurement and management issues, as well as on the use of information generated by management accounting systems for management purposes. Among the research subjects attracting the interest of international authors and researchers, the highest ranking are the choice of financial and non-financial measures of performance, including the use of *Balanced Scorecard* in the public sector (see, e.g. Lee 2008; Guthrie 1994, Spiegelman 2001), and the usefulness and quality of performance reporting systems in the public sector organizations (e.g. Carlin, Guthrie 2001, Walker 1995, Pettersen 2001). Relatively high attention is also given to changes in the performance measurement concept under the influence of NPM (Jansen 2008, Hyndman, McGeough 2006) and to the public sector's use of methods of relative performance measurement, such as rankings or benchmarking (Ball 2001, Johansson, Siverbo 2009).

The studies on public sector's management accounting methods and tools give a special role to institutional theory, because no other theory is better at explaining the influence of institutional, social, and political factors in this area (Modell 2009, p. 267). Of particular interest are those studies analysing changes in entities' management accounting (e.g. Bogt 2008) and in its practices related to performance measurement caused by the implementation of NPM and other improvements, which treat new regulations as the driver of change (Sharifi, Bovaird, 1995, Cavalluzzo, Ittner, 2004). S. Brignall and S. Modell (2000) have used institutional theory to identify the factors which determine successful implementation of a comprehensive performance measurement and management system in the public sector in the NPM environment.

5. The theoretical basis of NPM studies: the New Institutional Economy (NIE)

An important theoretical underpinning of New Public Management is the New Institutional Economy (NIE)¹, which makes use of public choice theory, agency theory, property rights theory, and transaction cost theory. NIE has emerged as a response to the "institutional conglomerate" present in the neoclassical economics, particularly to its treatment of formal and informal institutions as a sort of "black hole". The advocates of NIE argue that

¹ Institutional economy appeared over 100 years ago in the USA. It was created by Thorstein Veblen, Wesley C. Mitchell and John R. Commons, who were the first to analyse the influence of institutions and institutional changes on the working of the economy. Although its importance started to fade after some years, in the early 1960s it reappeared as the New Institutional Economy (Landreth, Colander, 1998).

institutions² are an important determinant of an economy's capacities and that their quality and character set the pace of economic development (Landreth, Colander 1998).

Property rights theory, transaction cost theory, and agency theory are critical to concept of NIE. The first theory stresses the importance of property rights for making economic decisions. Its advocates (ArmenAlchian, Harold Demsetz, SvetozarPejovich) indicate that property rights determine the effective allocation and use of resources. The more specific property rights are, the more effective business activity will be. Property rights theory applied to NPM entails the decentralisation of management, a wider scope of property rights and greater responsibility for the effective use of an organization's resources and the fulfilment of its objectives.

Transaction cost theory, developed by H. Coase and subsequently elaborated by O. Williamson (1998), assumes that all contractual relations can be evaluated in terms of transaction costs (Willimson 1998). O. Williamson has defined transaction cost economics as a comparative and institutional approach to organizational studies, where a transaction is treated as the basic unit of analysis.

The last of the three theories is agency theory, which deals with the relations between the principal and the agent participating in economic processes. The theory currently serves a range of purposes. In addition to providing the possibility of studying the relations between the owner and the manager, it also explains those occurring between the managers and personnel, between the state and the boards of state-owned firms/managers in public sector entities, and between suppliers and the recipients, frequently without indicating who is the principal and who is the agent. Agency theory is given credit for its contribution to studies on performance measurement and the quality of information systems in the public sector. It is considered in two dimensions:

- the first is directly related to institutional theory and concerns the relations between the state or the central public sector entities (the principal) and the entities directly involved in the execution of public tasks (the agents);
- the second concerns the relations between the managers of a public sector entity (the principal) and its personnel (the agents).

According to institutionalists, the economic, cultural and sociological factors are so strongly intertwined that studies on business organizations should

² According to W. Mitchell, institutions should be understood as common behavioural patterns among humans (the source), who pursue their goals guided by their own will and awareness, thus acting somewhat independent of the world around them. Institutions are ubiquitous in the economic sphere and have a sociological dimension. (Spychalski 1999, p.342).

go beyond economic factors alone (Landreth, Colander 1998, p. 563). A manifestation of the interdisciplinary character of institutionalism is new institutional sociology, which developed at the turn of the 1970s.

To explain the internal dynamics of institutionalization and deinstitutionalization processes, P. DiMaggio and W. Powell (1983) put forward the concept of institutional isomorphism, which develops within the framework of new institutional sociology. According to these researchers, it is isomorphism that brings about most institutional changes. Further, the development and the structure of an organizational field, i.e. of an organizationally unique system of connections between organizations of the same type, depend on three isomorphic mechanisms: coercive, mimetic, and normative. The first has its roots in political powers and concerns legitimization; the second develops from typical reactions to uncertainty; and the third is driven by professionalization processes.

Coercive isomorphism may exert formal or informal pressures. This means that it may come from business partners and consumers, the legal context of the organization, or even public opinion interested in the legal possibility of organized action. P. Di Maggio and W. Powell (1983) are of the opinion that organizations adjust their internal rules and procedures to those operated by the institutions that supply them with material and non-material resources, thus guaranteeing their continued functioning.

Mimetic isomorphism arises from uncertainty and encourages imitation. Imitation is commonly used as a means of institutional development at both the micro and macro levels. It is most readily adopted in complicated and unstable situations, as it allows the costs of developing efficient solutions to be reduced.

Normative isomorphism is related to academic and occupational professionalization. DiMaggio and W. Powell (1983) define professionalization as an activity undertaken by a particular occupational group to gain autonomy, to be able to define its work conditions and methods by establishing standards of required knowledge and qualifications, and to have tools for legitimizing its professional autonomy. An outcome of institutionalization is the exchange of information among professionals.

It has already been mentioned that the Polish standards developed for management control systems require them to be monitored and evaluated on an on-going basis. Therefore, the provisions of the act and the standards set out in *Finance Ministry Statement no. 23* become formal institutions which obligate those in charge of public sector entities to have management control systems. Formal requirements aside, it is quite obvious that the entities' managers need performance information to be able to manage and fulfil their objectives (informal institutions).

The short period of time during which management control has been used in Poland and the limited experience and practical knowledge of public sector employees in using its measures pose a threat to the quality and adequacy of the whole system of performance measurement. Agency theory explains this risk, stating that the implementation of an effective system of performance measurement may be impeded by a weak and dispersed principal (level I) or its “lack of knowledge” (levels I and II).

6. An empirical study on the usefulness and adequacy of performance measurement systems used in selected local government entities in Poland

6.1. Research methodology

The data for analysis was collected from self-completion (auditorium) questionnaires distributed among 45 respondents. This approach ensured a response rate of 99%; however some of the respondents failed to answer all survey questions. The Tables below have been structured to account for the order of questions asked in the survey.

6.2. The research sample

The survey involved 45 respondents representing local government entities in one of Polish voivodships.

In the sample, 36% of respondents were managers and 64% occupied non-managerial positions; 70% had been with the public sector since the beginning of their careers. The remaining 30% had worked in the private sector before, thus:

1. they had been able to gain practical knowledge of corporate culture and business management methods and tools;
2. they were able to promote the diffusion of corporate management solutions and tools in the public sector, for instance by reducing resistance to change, using their experience to support processes of change, and coaching.

The random sample approach applied in the survey makes its results of limited use for generalisation purposes, however they provide a foothold for further, more detailed studies.

6.3. Research aims

The study set out:

1. to learn about accounting tools and methods that managers and personnel in local government entities use to run their organizations or fulfil operational tasks;
2. to identify the informational needs of these managers and personnel that must be satisfied for their management and operational tasks to be carried out effectively and efficiently;
3. to establish what accounting tools and methods the two groups of employees would like to have so that their informational needs concerning a management control system can be met;
4. to characterise performance measurement systems and the indicators used in the surveyed entities.

6.4 Analysis of the survey results

With regard to the first question, the survey showed that traditional budgeting (50% of responses) and budget execution evaluated against actual spending and revenues (31.8%) still played the most important role in LGEs.

Table 1. Approaches, methods and tools used by respondents to manage their LGEs or to fulfil their tasks

Approaches, methods and tools	%
Cost and revenue budgeting	50.00
Regular analysis of actual costs and revenues	31.82
Classification of costs into fixed and variable	18.18
Measurement of performance based on selected non-financial indicators	18.18
Analysis of investment project profitability with respect to the special character of the public sector	15.91
Measurement of performance with selected financial indicators	15.91
Calculation and analysis of the unit cost of services	13.64
Analysis of variances between budgeted and actual amounts	11.36
Analysis of costs and benefits for short-term decision making	11.36
Classification of costs into direct and indirect (full costing)	9.09
Benchmarking	6.82
Balanced Scorecard	2.27
Others	0.00

Note that the respondents could check more than one answer.

Source: authors' research results .

According to the data, the second factor was less significant in the group of non-managerial employees than among managers. The data also shows that legislation clearly exerts institutional influence on the range and types of information that LGEs use to manage their processes and to carry out their tasks, and on how the entities account for their use of public funds. The fact that the non-managerial personnel is less interested in actual costs or incomes from services may point to a limited efficiency of the internal communication systems (flows of information) in their entities, or to their low awareness or insufficient involvement in performing tasks effectively and efficiently. The results highlight areas where the entities' accounting information systems need major changes if management control is to attain its goals. It is noteworthy that these results and the conclusions they offer are consistent with those obtained by J. Pettersen (2001), according to whom defining and interpreting information generated by accounting systems is important for modifications to the management of public sector entities.

Additionally, the data in Table 1 points to the relatively low use of non-financial indicators in measuring LGEs' performance. Less than one out of every five respondents stated that their LGE used these indicators. At the same time, they were more frequently utilised by managers than other personnel. This can be explained through their usefulness for managers in their management of their organizations. However, the finding may also support a thesis about the low efficiency of information systems and the low quality of communication between particular levels in the LGE. These conclusions confirm, again, the insufficient implementation of management control standards in the following areas: goals and risk management, information and communication, and monitoring and evaluation. As emphasized above, an adequate information and communication system is necessary for an LGE to manage its processes.

The next step in the research involved the identification of the information needs of LGE managers and personnel that must be met to allow them to carry out their managerial and operational tasks effectively and efficiently (questions no. 2 and 3). An indirect approach to establishing the needs was adopted; namely, the respondents were asked to indicate those accounting management methods and tools that could help them manage their entities or fulfil their daily tasks. The survey outcomes are presented in Table 2.

Table 2. Methods and tools the respondents needed implemented to support LGE management or the performance of their tasks

Methods and tools facilitating LGE management or the execution of tasks	%
Regular analysis of actual costs and revenues	36.36
Analysis of investment project profitability with respect to the special character of the public sector	27.27
Calculation and analysis of the unit cost of services	20.45
Cost and revenue budgeting	18.18
Analysis of variances between budgeted and actual values	18.18
Measurement of performance using selected financial indicators	18.18
Analysis of costs and benefits for short-term decision making	15.91
Measurement of performance with selected non-financial indicators	15.91
Classification of costs into fixed and variable	11.36
Benchmarking	11.36
Classification of costs into direct and indirect (absorption costing)	9.09
Balanced Scorecard	6.82
Others	0.00

Note that the respondents could check more than one answer.

Source: results of the authors' research.

The results point to respondents' growing demand for information about actual costs and incomes generated by services. They also reflect a substantial need for information about investment projects' profitability and rationale vis-à-vis their long-term financial results, including external impacts. Another major piece of information the respondents would like to have is service or product costs. This need may stem from another institutional determinant of their demand for information, i.e. the rules governing the financial settlement of EU aid programmes. It may also be related to the 'own contributions' LGEs may have to make when services and products are co-financed by the EU. Additionally, it confirms the pressure from coercive isomorphism on the surveyed entities' information systems (as a result of which they tend to adjust their systems and structures to the requirements of their fund providers).

The non-financial indicators of performance used in LGEs represent a relatively small share of all management accounting tools and methods, both in terms of implementation and expectations. This result is consistent with Lee's study (2008), where managers pointed to financial indicators, such as costs or financial results, as having the greatest importance in managing public sector entities.

This limited interest in the non-financial indicators may be partly due to their poor selection or their ineffective use in the surveyed LGEs. This conclusion is based on the results provided in Table 8.

Considering the purpose of this study, its part devoted to performance measurement systems and indicators used in the surveyed LGE was important. In the first stage, the entities were investigated to determine whether such solutions were present. The results showed that 29.54% of them were found to use financial or non-financial indicators of performance (see Table 3).

Table 3. The use of performance measures in the investigated LGEs

Does your LGE use financial or non-financial indicators of performance?	%
Yes, the indicators are used, but they measure the overall performance of the entity and not of its internal subdivisions.	18.18
Yes, the indicators are used and they show the overall performance of the entity as well as of its subdivisions.	11.36
Indicators are not used.	34.09
I don't know if any indicators of performance are used.	36.36
Total	100.00

Source: results of the authors' research.

As can be seen, 18.18% of the entities applied the indicators with the exclusive purpose of measuring the performance of the entire organization, without cascading them down to lower levels. This limited application of performance measurement systems, together with the aforementioned prevalence of traditional budgeting systems (without feedback) as LGEs' main accounting tool, seems to prove that coercive isomorphism (legislation) strongly determines management processes in the entities, including the range and type of information they use for management and task performance purposes and their ways of accounting for effective use of public resources. It may also be an attempt at reducing the negative impacts of the first dimension of agency theory mentioned by the authors. Only 11.36% of respondents stated that their performance measurement indicators were applied to both the entire organization and its subdivisions, thus contributing to greater decentralisation, wider use of the entrepreneurial style of management, and motivating people to work with greater effectiveness and efficiency.

It is noteworthy that in the opinion of more than 34% of respondents their LGEs did not use performance indicators and that another 36% did not know if performance measurement systems were used or not. It is probable that some respondents in the second group represented LGEs where performance indicators were either not used or served the purpose of overall performance evaluation, i.e. without being cascaded down to the lower organizational levels

and without ensuring that the non-managerial personnel has access to this information too. The data in Table 4 shows that around 80% of respondents were of the opinion that their entities did not use performance indicator systems, or did so to a very limited extent, separately from the motivation systems. The authors consider this another proof of strong institutional effects on LGEs' management systems. It is, therefore, justified to conclude that the entities surveyed continue to foster a culture of administration instead of implementing the entrepreneurial style of management inherent in the concept of New Public Management. This conclusion coincides with that reached by Hyndman and McGeough (2006), according to whom this type of situation prevents those in charge from being held accountable for their actions and hampers management in the organization, owing to the lack of necessary information and reliable performance data.

The infrequent use of performance indicators in managing an LGE was exposed by the analysis of relationships between performance measurement systems and motivation systems conducted among respondents from organizations measuring performance (Table 4).

Table 4. Indicators of performance and the motivation system

In your entity (subdivision), performance measures:	%
are part of the motivation system, and their degree of fulfillment determines employee promotion or the amount of compensation	10.53
are formally part of the motivation system, but the degree of their fulfillment does not affect the amount of compensation (e.g. bonuses) or promotion,	10.53
have only formal status and remain outside the motivation system.	78.95
Total	100.00

Source: results of the authors' research.

Only 10.53% of these respondents (ca. 4% of the total sample) stated that performance measurement systems were coupled to the motivation system in their entities and thereby influenced employee compensation or a career path. This suggests that these are the only cases when a real management control system allowing an LGE to be managed effectively and efficiently was actually functioning.

Another 10.53% indicated that their entities' performance measurement systems were only formally related to the motivation systems, having no measurable influence on the evaluation of employees' effectiveness and efficiency. Almost 79% of respondents in entities using performance indicators pointed to their purely formal character and complete separation from the motivation system. This means that a total of around 90% of performance

indicator systems are superficial and that they were created only to meet institutional requirements. They also represent an attempt to mitigate the adverse impacts of the first dimension of agency theory. As far as NPM analysis is concerned, these systems neither make the public sector more effective and efficient, nor do they enable better use of the available resources. These conclusions confirm those reached by Carlin and Guthrie (2001) who point to discrepancies between organizations' performance management practices, the expectations of its supervisory authorities, and the laws in force.

The degree to which a performance measurement system is accepted and its capacity for motivating employees are greatly dependent on the approach used to construct its indicators (top-bottom/participatory, SMART, etc.).

Table 5. Approaches to constructing performance indicators

The performance indicators in your entity were:	%
imposed by the law in force or superior authorities/institutions without any involvement of its personnel / managers	50.00
developed by the senior management without any involvement of the personnel	44.44
developed by the senior management in cooperation with the personnel	5.56
developed by an external firm	0.00
Total	100.00

Source: results of the authors' research.

In the opinion of 50% of respondents from LGEs operating performance measurement systems, the performance indicators were imposed by the law or superior authorities, without any contribution from those to be evaluated by them. Another 44.4% stated that the indicators had been developed by the senior management. Only 5.6% indicated that the process used to develop indicators had been participatory, i.e. involving those directly interested. None of the sampled organizations requested an external firm to provide it with a performance measurement system. The fact that the personnel in 94% of LGEs did not participate in developing their entities' performance management systems (Table 5) and that the system was run independently of the motivation system (Table 2) suggests that public sector entities are basically devoid of real performance measurement systems.

The above data can be supplemented with the results of the investigation aimed at identifying the ways of establishing the target values of indicators. Almost 46% of respondents in entities operating with performance measurement systems answered that the targets had been imposed by the law or superior authorities. According to 33.3% of them, the targets were determined by the

LGE management. In only slightly above 4% of LGEs were the targets established in cooperation with the employees assigned the task of achieving them.

Table 6. Methods of setting the target values of performance indicators

The target values of performance indicators in your LGE were:	%
imposed by the law in force or external authorities	45.83
imposed by the senior management	33.33
negotiated between the senior management and the entities' subdivisions (employees) to be evaluated by them	4.17
I don't know who set them	16.67
Total	100.00

Source: results of the authors' research.

A factor determining the perception of the quality of an LGE's performance measurement system is the target values of the implemented indicators.

Table 7. Evaluation of the target values of performance indicators

Opinions on the target values of indicators were:	%
very demanding and impossible to fulfil	5.26
very demanding but achievable	10.53
moderately demanding	26.32
relatively easy to fulfil, with a very weak efficiency-boosting effect	10.53
no opinion	47.37
Total	100.00

Source: results of the authors' research.

According to the survey, over 47% of respondents considered their performance indicators to be realistic (i.e. achievable). Only 5.2% answered that they were impossible to fulfil. Another 27% described them as only moderately demanding. Therefore, one may presume the indicators have a small effect on making LGEs' management systems more effective and efficient. Additionally, a meaningful share of the respondents (47%) could not tell how difficult their indicators were. This means that the indicators have no bearing on the motivation systems, and consequently fail to meet the requirements of a management control system as defined by the public finance law.

The autocratic approach to defining the types as well as the targets of indicators that was revealed in the survey has an effect on how staff perceives the quality of their performance measurement systems (Table 8).

Table 8. Assessment of LGEs' performance indicators

What is your opinion on the performance indicators in your entity?	%
The indicators are very well defined, because their values really show changes in my entity's performance	0.00
The indicators are defined quite well, because their values approximate changes in my entity's performance	20.00
The indicators are not chosen well, because in many cases their fulfillment does not depend on the performance of my entity, but on the achievements of other subdivisions	13.33
The indicators are inappropriate, because they do not show the performance of my entity at all	66.67
Total	100.00

Source: results of the authors' research.

According to almost 67% of respondents, their entities' performance indicators were incorrect because they completely failed to show the results of their activity. For another 13% their systems were dysfunctional, because indicator fulfilment depended on factors outside the evaluated person's control. This situation defies SMART's basic rules for creating indicators, which should quantify only those outputs that the person being evaluated can control. None of the respondents was of the opinion that their entities' performance indicator systems could capture changes in their performance, thereby revealing the low usefulness and quality of the systems that LGE use to report on their performance (e.g. Carlin, Guthrie 2001, Walker 1995).

The quality of improvements made to management accounting and performance management systems was also evaluated by the respondents based on the benefits they expected (Table 9).

Table 9. Analysis of benefits expected from the implementation of accounting management tools and methods

Benefits expected from the implementation of accounting management methods and tools	%
Better control and lower costs	50.00
Better quality of services	40.91
Better-motivated personnel	25.00
More efficient personnel	20.45
Higher credibility of the institution	20.45
Others	0.00

*Not that the respondents could check more than one answer.

Source: results of the authors' research.

The expected benefits that the respondents mentioned the most frequently were better control and lower costs (50%) and higher quality of services (41%). The first type of benefits solidifies the financial approach to measuring LGE performance. While confirming the outcomes of Lee's study (2008), the relatively large share of respondents expecting the quality of services to be higher is inconsistent with their weak interest in financial indicators. From the perspective of a performance measurement system, the important benefits are the stronger motivation (25%) and increased efficiency (20.45%) of employees. The survey data shows, though, that both the existing and expected solutions within management accounting and performance measurement weakly improve operational effectiveness and efficiency in LGEs.

The period necessary for management control to yield the intended results is strongly determined by the barriers to its implementation. According to the respondents, the major barriers to introducing new solutions into their LGEs' performance measurement and information systems were lack of time (55%) and lack of necessary knowledge (30%). These and other obstacles are rated in Table 10.

Table 10. Barriers impeding the implementation of management accounting tools and methods

Barriers impeding the implementation of management accounting tools and methods	%
Lack of time	54.55
Lack of knowledge	29.55
Lack of funds	22.73
Impracticality	11.36
Others	0.00

*Note that respondents could check more than one answer.

Source: results of the authors' research.

7. Conclusions

The results of the survey of Polish LGEs' performance measurement systems allowed its authors to make a preliminary assessment of their compliance with the management control standards (Table 11).

It was found that performance measurement systems in the LGEs surveyed were determined by strong institutional influences affecting their management systems. They were not useful, neither for managers nor for lower-ranking employees, and in addition fail to meet the requirements of the New

Public Management concept. Polish LGEs have not switched their control mechanisms from “passive compliance with procedures” to “active control.”

The above survey is the first step towards identifying the information needs of public sector employees and the degree of NMP implementation. It will be followed by another questionnaire survey with a sample extended to other public sector entities in Poland, and a by comparative study on CEECs, the outcomes of which will be juxtaposed with those obtained by Western European authors.

Table 11. Management control standards, purposes, and levels of fulfillment

Standard	Purpose	Level of fulfillment
Internal environment	Regulates entities' management systems and their setup. Its elements are integrity and ethical norms, and professional competencies of managers and personnel (the required level of knowledge, skills and experience), the scope of duties, authority and responsibility assigned to particular subdivisions.	Low. The method of setting up a performance measurement system, the strength of the systems' relationship with the motivation system and the actual access to feedback on LGE achievements show that the entities' performance measurement systems are poorly developed.
Objectives and risk management	Describes tasks to be fulfilled and their monitoring, identification of risks, risk analysis, risk handling and countermeasures.	Low. The research has found a very weak connection between LGEs' objectives and their performance measurement systems, which significantly reduces LGE capability of monitoring and managing performance and risks.
Control mechanisms	Requires LGEs to limit particular risks by documenting their control systems, to supervise tasks so that they are performed economically and effectively, to ensure the continuity of operation, and to protect resources.	Low. There are significant gaps between the actual performance measurement practices in LGEs, the expectations of their stakeholders, particularly of their supervisory authorities, and the laws introduced several years earlier.
Information and communication	Requires that LGE personnel have access to the necessary information and that an effective system of internal and external communication is functional, ensuring the smooth flow of information and its correct understanding by the recipients.	Low. Information and internal communication systems are insufficiently developed. There is little or no feedback on the actual achievements of LGEs, and low opinions of LGEs' performance indicators (Table 6).

Monitoring and evaluation	Defines how effective a control system and its components should be to solve the problems which appear	Low. Defective responsibility and accountability mechanisms, problems with ensuring that the evaluations of an entity's performance are reliable and with managing the entity, caused by unavailability of the necessary information. Both the first and second dimensions of agency theory produce serious negative effects.
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Source: Developed by the authors based on *Finance Ministry Statement no. 23*.

References

- Agh A. (2003), *Public Administration in Central Eastern Europe*, [in:] B.G. Peters and J. Pierre (ed.) *Handbook of Public Administration*, pp. 536-48, London, Sage
- Ball A. (2001), *Discovering its own relevance? Reflections on the "new" management accounting in the public sector*, "Accounting Forum", 24(3)
- BogtTer, H.J (2008), *Management accounting change and New Public Management in local government: a reassessment of ambitions and results – an institutionalist approach to accounting change in the Dutch public sector*, "Financial Accountability & Management", 24(3)
- Brignall S., Modell S. (2000), *An institutional perspective on the performance measurement and management in the 'new public sector'*, "Management Accounting Research, Vol. 11
- Carlin T, Guthrie J (2001), *The new business of government budgeting: reporting non-financial performance information in Victoria*, "Australian Accounting Review", Vol. 11 (3)
- Cavalluzzo K.S., Ittner C.G. (2004), *Implementing Performance Measurement Innovations: Evidence from Government*, "Accounting, Organizations and Society", Vol. 29, No. 3
- DiMaggio, P. J., Powell, W. W. (1983), *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organisational Fields*, "American Sociological Review" Vol. 48
- Ferlie E., Ashburnen L., Fitzgerald L., Pettigrew A. (1996), *The New Public Management in Action*, Oxford University Press, Oxford
- Guthrie J. (1994), *Performance Indicators in the Australian Public Sector*, [in:] E. Buschor, K. Schedler (ed.), *Perspectives on Performance Measurement and Public Sector Accounting*, Paul Haupt Berne, Bern/Stuttgart/Vienna
- Hood C. (1991), *A Public Management for All Seasons?*, "Public Administration", Vol. 69 (1)
- Hoggett, P. (1991), *A New Management in the Public Sector?*, "Policy and Politics", Vol.19, No. 4

- Hughes O. E. (1994), *Public Management and Administration. An Introduction*, The Macmillan Press Ltd., London
- Hyndman N., McGeough F. (2006), *NPM and performance measurement: a comparative study of the public sectors in Ireland and the UK*, "Irish Accounting Review", Vol. 15(2)
- Jansen E.P. (2008), *New public management: perspective on performance and the use of performance information*, "Financial Accountability & Management", 22(4)
- Johansson T., Siverbo S. (2009), *Explaining the utilization of relative performance evaluation in local government: a multi-theoretical study using data from Sweden*, "Financial Accountability & Management", 25(2)
- Kernaghan K., Marson B., Borins S (2000) *The New Public Organisation*, Institute of Public Organisation of Canada, Toronto
- Komunikat Nr 23 Ministra Finansów z dnia 16 grudnia 2009 r, (Finance Ministry Statement Nr 23, of 16 December 2009), *Standardy kontroli zarządczej dla sektora finansów publicznych (Standards of management control for the public finance sector)*, Dz. Urz. MF 2009r. nr 15, poz. 84
- Landreth H., Colander D.C. (1998), *Historia myśli ekonomicznej (History of Economic Thought)*, Wydawnictwa Naukowe PWN, Warszawa
- Lee J. (2008), *Preparing performance information in the public sector: an Australian perspective*, "Financial Accountability and Management", 24(2)
- Modell S. (2009), *Institutional research on performance measurement and management in the public sector accounting literature: a review and assessment*, "Financial Accountability & Management", Vol. 25(3)
- OECD (1995), *Governance in Transition: Public Management Reforms in OECD Countries*, OECD, Paris
- Osborne D, Gaebler T. (1992), *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*, Harmondsworth, Middlesex: Plume Books
- Pettersen I.J. (2001), *Implementing management accounting reforms in the public sector: the difficult journey from intentions to effects*, "The European Accounting Review", 10(3)
- Pollitt C. (1990), *Managerialism and the public services: The Anglo-American Experience*, Cambridge, Basil Blackwell
- Pollitt C., Bouckaert G. (2004), *Public Management Reform*, Oxford, University Press.
- Polidano C., Hulme D. (1999), *Public Management Reform in Developing Countries*, "Public Management Review", volume 1, issue 1
- Randma-Liiv T. (2008), *New Public Management versus Neo-Weberian State in Central and Eastern Europe*, Conference materials: Trans-European Dialogue 1, Towards the Neo-Weberian State? Europe and Beyond, 31 Jan - 1 Feb 2008, Tallinn
- Rudolf W., *Koncepcja governance i jej zastosowanie – od instytucji międzynarodowych do niższych szczebli władzy (The concept of governance and its application – from international*

- institutions to the lowest levels of power*), „Acta UniversitatisLodzensis, Folia Oeconomica” Vol. 245, 2010
- Sharifi S., Bovaird T. (1995), *The Financial Management Initiative in the UK Public Sector: The Symbolic Role of Performance Reporting*, “International Journal of Public Administration”, Vol. 18, No. 2–3
- Spiegelman J. (2001), *A Performance that Doesn't Measure Up*, *The Public Sector Informer*, “The Australian Financial Review”, August
- Spychalski G. (1999), *Zarys historii myśli ekonomicznej (An overview of economic thought)*, Wydawnictwo Naukowe, Łódź
- Sztompka P. (1996), *Looking Back: The Year 1989 as a Cultural and Civilizational Break*, “Communist and Post-Communist Studies”, Vol. 29(2)
- Ustawa z 27 sierpnia 2009 r. o finansach publicznych (Public Finance Act of 27 August 2009), Dz. U. 2009, nr 157, poz. 1240
- Walker R. (1995), *Who reads annual reports, Proceedings of the Seminar on Annual Reporting in the NWS Public Sector: The best is yet to come, Report of the Public Accounts Committee*, September
- Williamson O. E. (1998), *Ekonomiczne kapitalizmu: firmy, rynki, relacje kontraktowe (Economic capitalism: firms, markets, and contractual relations)*, Wydaw. Naukowe PWN, Warszawa
- Verheijen A.J.G. (2003), *Public Administration in Post-Communist States*, [in:] G.B. Peters i J. Pierre (red.) *Handbook of Public Administration*, pp. 489-99, London, Sage
- Zawicki M. (2011), *Nowe zarządzanie publiczne (New Public Management)*, Polskie Wydawnictwo Ekonomiczne, Warszawa

Streszczenie

POMIAR DOKONAŃ I ANALIZA POTRZEB INFORMACYJNYCH MENEDŻERÓW I PRACOWNIKÓW JEDNOSTEK SAMORZĄDU TERYTORIALNEGO W KONTEKŚCIE NEW PUBLIC MANAGEMENT

Rozrost sektora publicznego i postępujący w nim kryzys wartości przyczyniły się do podjęcia w wielu krajach głębokich reform tego sektora, bazujących na paradygmacie menedżerskiego i rynkowego stylu zarządzania, które zyskały miano New Public Management – NPM.

Wdrożenie i skuteczne wykorzystanie koncepcji zarządzania jednostkami sektora publicznego, bazującej na dobrych praktykach zarządzania organizacjami biznesowymi,

wymaga implementacji odpowiednich narzędzi rachunkowości zarządczej wspierających procesy zarządcze. Główne cele badawcze przyjęte przez autorów tego artykułu obejmują:

- identyfikację metod i narzędzi rachunkowości zarządczej stosowanych aktualnie przez kierowników badanych jednostek samorządu terytorialnego;
- analizę potrzeb informacyjnych kierowników i pracowników jednostek samorządu terytorialnego w obliczu wdrażania i stosowania systemu kontroli zarządczej,
- ocenę przydatności, adekwatności i skuteczności systemu pomiaru dokonań stosowanego przez jednostki samorządu terytorialnego w Polsce, a także stopnia spełnienia przez niego wymogów prawnych, w kontekście założeń systemu kontroli zarządczej oraz koncepcji NPM.

Badanie zostało przeprowadzone w formie wywiadu - ankiety audytoryjnej, skierowanej do 45 respondentów reprezentujących jednostki samorządu terytorialnego. Uzyskane rezultaty potwierdzają, iż system pomiaru dokonań stosowany przez jednostki samorządu terytorialnego w Polsce jest wynikiem silnego oddziaływania instytucjonalnego na system zarządzania tymi jednostkami i nie jest przydatny dla kierowników i pracowników tego sektora, a także nie spełnia wymagań stawianych przez założenia koncepcji NPM.