
Internal Audit as a Tool to Improve the Efficiency of Public Service

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Abstract:

Purpose: Efficiency and performance measurements in the public sector represent a problematic area considering the nature of public administration's activities. The authors attempt to define the efficiency metrics for internal audit as exemplified by one of the European Union countries and its contribution in improving the performance of public entities and the efficiency of public spending.

Design/Methodology/Approach: A mixed methodology combining the results of qualitative and quantitative research is used to empirically verify the hypotheses related to the research problem presented. Qualitative research is based on descriptive analysis, and the quantitative research will include the method of statistical information systemization, based on statistical source data analysis.

Findings: Empirical research confirmed a positive impact of internal audit efficiency metrics on the completion of public service tasks at an operational level while no impact was recorded on the scale of completion for the areas at the strategic level of the Council of Ministers.

Practical Implications: Managers in the public skateboard should decide to increase the performance budget and decide to link it to an internal audit.

Originality/value: Internal audit should be more focused on examining the effectiveness of public administration and, to a lesser extent, only hardening the assessment of the decision-making process.

Keywords: Internal audit, efficiency, priority tasks, performance budget.

JEL classification: H41, H11, G30.

Paper Type: Research study.

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1. Introduction

In the age of global economic growth, dynamic socio-economic, technological and IT changes the public sector remains a very important economic entity, especially in a democratic system which gives the citizens an opportunity to express their preferences when it comes to goods to be provided by the State. Significant economic growth drivers include the efficiency of the tools used in public finance management and the quality of public goods and services offered. Effective and efficient completion of public service tasks is one of the fundamental objectives both citizens and economic entities expect the government to accomplish. These issues are extremely important at the time when public authorities counteract the social and economic consequences of COVID. When earmarking large public funds to that purpose, states must also remember to implement the most effective solutions.

In order to increase the efficiency and effectiveness of public finance management in the OECD countries, the legislature introduced the duty to ensure an effective and efficient management control at public entities, one that is commensurate with the risk involved in their operations. Internal audit is a tool for measuring the efficient and effective functioning of management control, providing support to entities' management in streamlining the control mechanisms that help achieve relevant goals and tasks.

In this context, questions arise as to the role of the internal audit in adding value to public organisations and as to metrics that could measure its effectiveness and efficiency through the lens of the improvement in the organisation's operations achieved thanks to the support provided to the management in implementing its objectives and improving the efficiency of public finance management. Several attempts have been made globally to measure the efficient functioning of the internal audit in the public sector, using various models, but most of those studies boiled down to measuring audit efficiency metrics in the private sector. Questions as to how to perform the measurement, and how to evaluate and improve internal auditors' work focus on the need to identify internal audit efficiency drivers and on the attempts to find determinants of audit efficiency, but they do not relate to the public sector alone.

Accordingly, the article attempts to identify internal audit efficiency metrics at public administration entities and present its importance in improving performance of public entities, and the efficiency of public spending. The goal of the research is to present the impact of internal audit on the performance of public administration entities based on the assessment of the correlation between the level of completion of public service tasks by a selected group of comparable public sector entities (voivodship offices) in one of the European countries (Poland) and internal audit efficiency metrics. In the following discussions, an attempt will be made to prove the hypothesis that there is a statistically significant correlation between internal audit efficiency metrics and performance metrics of public administration entities.

A mixed methodology combining the results of qualitative and quantitative research is used to empirically verify the hypotheses related to the research problem presented. Qualitative research is based on descriptive analysis, and the quantitative research will include the method of statistical information systemization, based on statistical source data analysis, static dependence methodology, including fixed effect and random effect panel models.

2. Assessment of Internal Audit Efficiency

The increasing role and the widening scope of responsibilities of the internal audit in the public sector worldwide seem to be the main reasons to investigate the assessment of the efficiency of that tool (Alzeban and Gwilliam, 2014; Arena and Azzone, 2009; Cohen and Sayag, 2010; D'Onza *et al.*, 2015). The efficiency and the value of auditor services have been the object of many studies in management sciences internationally since the publication of the paper by Simunic (1980), where the author presented an auditor service pricing model, with the value of service determined by the quality and number of audits performed and completed.

In practical terms, efficiency is in essence about examining the relationship of the overall outcomes of an activity to the outlays incurred to produce such outcomes, using a quotient formula or a difference formula. Management efficiency ratio for organisations is calculated as a ratio of the outcomes (O) obtained to the costs (C) incurred, this relationship being considered efficient where the result is greater than one, neutral if it is equal to zero and inefficient if the result is lower than zero. Meanwhile, scientific research based on institutional theory shows that the degree of efficiency of internal audit depends on the company's business organisation chart and on its country of operation (Mihret, James and Mula, 2010; Al-Twaijry and Brierley, 2003; Al-Shbail and Turki, 2017). Literature on internal audit efficiency also presents its assessment through the lens of the function that supports organisations in achieving specific goals. Empirical research into the impact of internal audit function's efficiency on the organisation's performance (measured as a degree of achievement of specific goals) fails to provide an unequivocal answer as to the role of the internal audit in streamlining the organisation's operations and adding value to it. The existing studies on the efficiency of the internal audit function only lead to a supposition that the internal audit may not always be efficient but fail to make a clear statement with respect to the questions asked.

In most research papers from the second half of the twentieth century, neoclassical theory approach was applied to internal audit efficiency, that of transaction cost economics (Spraaakman, 1997) and agency theory (Adams, 1994). Barley and Tolbert (1997) in their paper institutionalization and structuration studying the link between action and institution, based on the institutional theory, present the impact of cultural and social factors on the decision-making process (Barley and Tolbert, 1997). Mihret, James, and Mula (2010) criticise neoclassical theory in their papers, and more specifically the use thereof in the search for the essence of the internal audit,

juxtaposing it with Marxist theory and institutional theory. According to Mihret *et al.* (2010), institutional theory makes it possible to assess the internal audit efficiency based on various observations, analysing audit efficiency determinants in developing and developed economies. Meanwhile, Anderson (2003) pointed to the need to identify organisational attributes that may contribute to the level of value added to the organisation by the internal audit. In their research, Hermanson and Rittenberg also address the question of the relevance of examining factors affecting the efficiency of the internal audit (Hermanson and Rittenberg, 2003). Coram *et al.* (2008) point in their academic papers to the need to examine the efficiency of internal auditors' work from a different perspective than the commonly held perception of the essence of the internal audit (Coram, Ferguson, and Moroney, 2008).

Cohen and Sayag (2010) also discuss factors affecting the efficiency of the internal audit in organisations in Israel. The results of empirical research conducted there revealed that the internal audit efficiency is higher in private sector organisations oriented to profit maximisation, which makes those institutions more interested in the internal audit. Meanwhile, the main objective in the public sector is to improve the quality of services provided (Cohen and Sayag, 2010). However, there are scientific views presenting a different angle on the internal audit in the public and private sector. Goodwin, in his research, defined the role of the internal audit depending on the sector, and the principal differences between the public and private sector in Australia and New Zealand (Goodwin, 2004). The author describes two main distinctions between the private and public sector and emphasises the significant role of the internal audit in the public sector. Firstly, public sector entities operate within a rigid legal framework. Secondly, the public sector is oriented to services and their quality, unlike the private sector where a great focus is on profit maximisation, increased profitability and minimised cost (Goodwin, 2003). Spraakman also presents in his research a greater demand for and a more important role of the internal audit in public entities (Spraakman, 1985).

As public administration aims to increase the efficiency of public spending (Aikins, 2011; Bouckaert, 2006), the internal audit function in the public sector faces increasing requirements. According to latest research from the last decade, a major factor that contributes to an increased efficiency is auditing oriented to risk analysis and minimisation in order to achieve public sector's goals and tasks (Arena and Azzone, 2009; Coetzee and Lubbe, 2014). As the role of the internal audit is to support an entity's management in achieving specific tasks, whether internal auditors' work can be made more efficient depends on how the internal auditor's role is perceived within the organisation, especially by governing bodies, as observed by Liston-Heyes and Juillet (2019) in their research on the functioning of the internal audit in Canadian public sector.

Coetzee and Erasmus (2017) used factor analysis to identify dependent and independent variables having an impact on internal audit efficiency in the public

sector. The most significant determinant affecting the efficiency of the internal audit according to the authors is the competence level and the management strategy at the audit unit with reference to the audited entity's tasks. The auditor's competence level determines the adequate understanding of processes within the organisation, and the efficiency of internal audit function is assessed, among others, by analysing the reasons for rejecting post-audit recommendations (Coetzee and Erasmus, 2017). Some studies also emphasise internal audit efficiency indicators which also refer to internal audit function's capacity to enhance an organisation's performance by achieving relevant goals and tasks (Badara and Saidin, 2013; Bota-Avram and Palfi 2009; Endaya and Hanefah, 2013; Lenz, Sarens, and D'Silva, 2014; Arena and Jeppesen, 2016; Diamond, 2002; Van Gansberghe, 2005; Onumah and Krah, 2012).

Ground-breaking research with respect to internal audit efficiency was conducted by Chen and Lin (2010) suggesting that the added value of the internal audit is presented through the lens of the audit plan completion rate and of audit performance metrics which attest to the usefulness of internal auditors' work to organisations as well as to the internal audit's role in streamlining organisational processes in the audited entities and achieving relevant goals and tasks (Chen and Lin, 2010).

As demonstrated by the above analysis of scientific research into internal audit efficiency, academic literature does not offer a clear answer as to what exactly it is driven by. Harmonisation of the main goals of the internal audit, and standardisation of its functioning in organisations provide an inspiring input into the discussion of audit efficiency drivers.

3. Research Sample Overview

Based on the approach presented by Chen and Lin (2010), a decision was made to assess the internal audit through the lens of performance metrics in one of European countries, i.e., in Poland. For that end the study made use of efficiency assessment indicators applicable in Poland as well as performance budget data measuring the efficiency of public service tasks completed. In Polish public sector, internal audit was introduced as a tool to support a public entity's manager in achieving relevant goals and tasks by means of management audit assessment and consulting activities.

The definition of management audit according to the Public Finance Act in effect in Poland is similar to the Anglo-Saxon understanding of this concept and focuses on efficient, cost-effective and timely implementation of respective goals and tasks of a public entity. In public finance sector entities, including in voivodeship offices, the efficient functioning of internal audit is measured according to the guidelines set out in the Ministry of Finance' Quality Assurance and Improvement Programme. With respect to national experience, following an analysis of the metrics used in the assessment of internal audit efficiency in Polish public sector, they were declared to be compatible with the metrics established by IIA (Dubis, Jain, Manchanda, and

Thakkar, 2010) and used worldwide. The analysis of the aforementioned empirical research by various scientists (Chen and Lin, 2010; Cohen and Sayag, 2010) into models used in the assessment of internal audit functioning have shown no significant discrepancies in terms of methodology and procedures.

Empirical research into the efficiency and effectiveness of the functioning of the internal audit as well as papers published by the Institute of Internal Auditors, OECD and other international organisations enable a synthetic overview of different approaches to defining relevant audit efficiency metrics in the public sector. Further on, the article presents empirical research into the efficiency of the functioning of the internal audit in public sector entities, drawing on the aforementioned papers and introducing a new approach to efficiency measurement, as well as using performance budgeting as an organisational strategy and the degree of attainment of respective budgetary goals as an added value of the internal audit. For public finance entities a long-term strategy is set, inter alia, using indicators at the level of functions which are performance-based in Polish budget.

The essence and structure of performance budget as used in Polish administration fit squarely into the worldwide trend and the OECD concept whereby performance budgeting consists in linking expenditure to measurable outcomes (Schick, 2007) based on accountability for the public spending outcomes and inclusion of the expected results in the budgetary process (Curristine, 2007). In Polish public sector, spending is presented at three levels government functions, tasks and subtasks, with an operational element – activities – specified as part of subtasks. A relevant quantitative or qualitative outcome is achieved when completing a task, which involves all of the activities performed or commissioned by government subsector entities in a given field of action, grouped into subtasks.

Seeing that the object of empirical research is to establish the correlation between completion rates for public service tasks set out in the performance budget, and internal audit efficiency indicators, and considering that performance budgeting is still in its implementation phase, the authors were faced with a tough job of ensuring data comparability with respect to public finance entities' completion of public service tasks. Following a comparative analysis of public service tasks performed by budgetary entities, voivodeship offices (urząd wojewódzki) seem, according to the authors, the only reliable research sample as regards public service tasks performed.

In Poland, the central state administration structure is composed of several segments, core government i.e., government, Prime Minister and Chancellery of the Prime Minister, ministers and ministries, heads of central offices, heads of State organisational units. This structure is elaborate and diverse. The structure of local state administration also consists of several segments; voivode and general government administration, government administration reporting to the voivode, government administration not reporting to the voivode, other government administration bodies. Local administration is of a doubly dualistic nature. On the

one hand, there is central state administration and local government administration, and on the other hand – local state administration operates in the form of general government administration and special administration, acting as an extension of ministries, central offices and State organisational units. Voivodeship offices being local entities of the state administration perform tasks determined by the Chancellery of the Prime Minister. These entities are a major link in the implementation of the government’s social and economic policy, spending 20% of public funds included in the budget law, and perform all of the state’s functions within their respective competence. The main tasks, the priority tasks performed by voivodeship offices.

Voivodeship offices perform the same public service tasks, which represent over 60% of all service tasks defined in the performance budget and thus ensure a representative sample. The authors have applied panel modelling to establish the impact of variable and constant individual characteristics of voivodeship offices on the value of internal audit efficiency metrics. Panel regression results revealing overall insignificance of variable and constant individual characteristics of voivodeship offices for the internal audit efficiency (multiple regression coefficient stand at $P > 0.05$) confirm the right selection of research sample. Consequently, the research sample is made of all voivodeship offices in Poland in 2009-2017. Table 1 presents panel regression results with a variable consisting of the selected “voivodeship offices” group.

Table 1. Panel modelling results

Internal audit efficiency indicator	Name of the priority task for 2017 and two subsequent years	P-Value, <0.05	Multiple regression coefficient, FE/RE, $P < 0.05$
Internal audit effectiveness			
Implementation of the working time budget assigned to planning and reporting	Welfare and social integration	fe 0.1192 re 0.0806	fe 0.119 re 0.081
	Employment promotion and unemployment prevention	fe 0.3651, re 0.5437	fe 0.365 re 0.544
Time spent on performing actions directly related to auditing activities compared to overall time budget	Environmental protection and environmental information system (until 2016, a task called “Waste management”, currently as a subtask)	re 0.9050 re 0.4335	fe 0.905 re 0.433
	State Treasury property management and protection of State Treasury interests		fe 0.707 re 0.103
Internal Audit added value			

Implementation of the working time budget assigned to checks	Security of the EU's external borders and of the territory of the Republic of Poland	fe 0.9095, re 0.9873	fe 0.910, re 0.987
	Education and care	re 0.098	re 0.098
Internal audit quality indicators			
Implementation of the working time budget assigned to training	Welfare and social integration	fe 0.042, re 0.0318	fe 0.042, re 0.032
	Heritage and national identity protection and popularisation domestically and abroad	fe 0.0105, re 0.0028	fe 0.011 re 0.003
Has external assessment within the meaning of standard 1312 been conducted?	Construction and housing	fe 0.4847, re 0.7227	fe 0.485, re 0.723
	Preparedness of the State's administrative and economic structures for national defence	fe 0.2507	fe 0.251

Note: See Table 1.

Source: Own compilation.

4. Methodology and Research Model Description

The research model is built around internal audit reporting principles in place in Polish public sector. As a matter of fact, budgetary entities' duty to provide information on the completion of internal audit tasks and performance-based presentation of expenditure, as introduced by the Ministry of Finance, became the source of basic data on the internal audit functioning in voivodeship offices for the purposes of empirical research. The research period adopted stems from legal regulations. As the explanatory (internal audit efficiency indicators) and response variables (task-level performance budget implementation rates) under analysis fail to meet the parametric test criteria such as distribution normality and quantitative nature of variables analysed, Spearman's rank-order correlation was used to demonstrate the impact of internal audit efficiency on the performance of voivodeship offices, which, according to the Authors, best illustrates the correlations between the internal audit efficiency variables and performance-budget implementation variables.

The point of departure for empirical research was defining the basis for internal audit efficiency metrics. When developing their internal audit efficiency metrics (explanatory variables) the Authors relied on the guidelines of the Polish Ministry of Finance, IIA international standards and literature review in the field of internal audit efficiency measurement in the public sector worldwide. The internal audit efficiency metrics are divided into the following characteristics, internal audit effectiveness, internal audit added value, internal audit quality. The internal audit

efficiency indicators were adapted to the Polish system of audit assessment in the public sector set out in the Quality Assurance and Improvement Programme, which was prepared in accordance with the IIA's International Standards for the Professional Practice of Internal Auditing. The effectiveness of internal audit is determined by indicators of audit plan completion with respect to auditing activities at voivodeship offices. The value-added of internal audit in the public sector is measured with the number of post-audit recommendations implemented, and of checks and consulting activities (level of management's trust in auditors). The quality of internal audit is determined by the level of experience and competence of the auditing team (training, self-assessment, internal assessment system). To define measuring scales for respective metrics, a 5-point Likert scale is used. Table 2 presents the indicators and measuring scales used to determine the weights.

Table 2. Overview of internal audit efficiency indicators with a description of the measurement scales adopted.

Indicator	Weights
Internal audit efficiency indicators	
Time spent on performing actions directly related to auditing activities compared to overall time budget	Percentage share of man-days used for performing actions directly related to auditing activities; 1 - < 30%, 2 - < 40%, 3 - from 40% to 60%; 4 - 60% to 69%, 5 - > 70%.
Implementation of the working time budget assigned to planning and reporting	1 - < 52%; 2 - from 53% to 64%; 3 - from 65% to 76%; 4 from 77% to 88%; 5 - > 89% .
Value added of the internal audit	
Ratio of the accepted post-audit recommendations to those issued	1 - < 50%; 2 - from 51% to 60%; 3 - from 61% to 76%; 4 from 77% to 88%; 5 - > 89% .
Implementation of the working time budget assigned to checks	1 - < 24%; 2 - from 25% to 43%; 3 - from 44% to 62%; 4 - from 63% to 81%; 5 - above 82%.
Internal audit quality – considered from the perspective of compliance with internal audit standards with respect to Quality Assurance and Improvement Program (standard 1300). Standards 1310, 1311 and 1312 clarify the content of standard 1300.	
Audit plan completion rate with respect to hours spent on training and professional skill improvement.	In most of the population audited the values stood at 100%.

Note: See Table 2.

Source: Own compilation.

Next, to measure the performance of voivodeship offices (response variables) the authors used performance-based performance metrics for the State's priority tasks set out in a consolidated performance-based expenditure plan as part of a rationale for the draft budget law for a given year, which should specify: breakdown of priority tasks and objectives for a given budget year, and a consolidated expenditure plan for the budget year and two following years. It follows from the research conducted that as of 2017 and two subsequent years, 23 priority tasks are assigned to

voivodeship offices, representing nearly half of all of the State's priority tasks identified and indicating that voivodeship offices can be treated as a representative sample. The next stage of the research model building was to conduct an analysis of the efficiency of internal audit functioning in voivodeship offices for 2009–2017. Variables were analysed based on the above defined internal audit characteristics: effectiveness, added value and quality.

The analysis of variables describing internal audit effectiveness and mean variable values at weights allocated to 2009–2017 revealed the following correlations. Time spent on performing actions directly related to auditing activities compared to overall time budget for 16 voivodeship offices for 2009–2017 shows a mean weight of 4, meaning the average share of the time spent on activities directly related to audit in the overall budget of the internal audit function falls within the 60–69% range. As per the Ministry of Finance recommendations, the share of man-hours spent on auditing activities in the overall working time budget of the internal audit function should be >70%. The mean audit plan completion rate with respect to hours spent on planning and reporting at voivodeship offices for 2009–2017 is 109%, while the plan completion rate for assurance activities is 66%, meaning that the efficiency of internal audit functions in this respect needs improving.

Table 3. Mean values of internal audit added value indicators in voivodeship offices for 2009–2017

<i>Year</i>	<i>Implementation of the working time budget assigned to consulting activities</i>	<i>Implementation of the working time budget assigned to checks</i>	<i>Ratio of the accepted post-audit recommendations to those issued</i>
2009	152%	99%	95%
2010	166%	78%	83%
2011	149%	-	100%
2012	117%	93%	96%
2013	160%	88%	97%
2014	237%	123%	92%
2015	120%	91%	99%
2016	206%	75%	97%
2017	90%	86%	97%
Mean value	155%	88%	95%

Note: See Table 3.

Source: Own compilation.

Internal audit quality indicators are viewed by the Authors through the lens of compliance with internal audit standards with respect to quality assurance and improvement programme (standard 1300).

The next and most important stage of empirical research was to run, based on the internal audit efficiency results obtained, Spearman's rank-order correlation to present their impact on the voivodeship offices' completion rate for priority tasks. Table 34 shows the values of Spearman's rank-order correlation coefficients (r_s) for internal audit efficiency indicators and priority tasks.

Table 4. Spearman's rank-order correlation coefficient values (r_s) for internal audit efficiency indicators and priority tasks.

No.	Name of the priority task for 2017 and two subsequent years (numbering corresponding to the performance-budget structure)	Internal audit efficiency indicator, where a correlation exists	Spearman's correlation coefficient (r_s)
1.	Security of the EU's external borders and of the territory of the Republic of Poland (until 2016 – State border protection, border traffic control and migration management)	Implementation of the working time budget assigned to checks	0.254 (weight), n = 73
2.	Education and care	Implementation of the working time budget assigned to checks	-0.343, n = 48
3.	State Treasury property management and protection of State Treasury interests	Time spent on performing actions directly related to auditing activities compared to overall time budget	0.237, n = 93
		Has self-assessment been conducted in the year under analysis?	0.239 (weight), n = 93
4.	Construction and housing (in previous years "Building supervision" and "Zoning planning and real estate management")	Has external assessment within the meaning of standard 1312 been conducted?	0.219 (weight), n = 91
5.	Heritage and national identity protection and popularisation domestically and abroad	Audit plan completion rate with respect to hours spent on assurance activities	0.348, n = 59 0.331 (weight)
		Implementation of the working time budget assigned to training	0.340 0.398 (weight), n = 59
6.	Preparedness of the State's administrative and economic structures for national defence	Has external assessment within the meaning of standard 1312 been conducted?	0.308 (weight), n = 96

7. Environmental protection and environmental information system (until 2016 task called "Waste management", currently as a subtask)	Time spent on performing actions directly related to auditing activities compared to overall time budget	0.262, n = 96
8. Welfare and social integration (until 2016 task Social activation of people with disabilities)	Implementation of the working time budget assigned to planning and reporting	0.539 (weight), -0.678, n = 16
	Implementation of the working time budget assigned to training	0,668 (weight), n = 16
9. Employment promotion and unemployment prevention (until 2016 one of the tasks in this area was: Occupational activation of people with disabilities, since 2016 as a subtask)	Implementation of the working time budget assigned to planning and reporting	0.562 (weight), n = 15
	Audit plan completion rate with respect to hours spent on assurance activities	0.562 (weight), n = 15
10. Road transport and road infrastructure (since 2016 task Support for road transport)	Implementation of the working time budget assigned to consulting activities	0.283 0.239 (weight), n = 79
	Implementation of the working time budget assigned to training	0.291, 0.256 (weight), n = 83
11. Health care system and access to health care benefits (Access to health care benefits in 2016)	Implementation of the working time budget assigned to planning and reporting	0.275, n = 94

Note: See Table 4.

Source: Own compilation based on research results.

Internal audit efficiency indicators have a positive impact on 11 out of 23 priority tasks, representing nearly half (48%) of priority tasks performed by voivodeship offices. All correlations between internal audit efficiency variables and completion rates for priority tasks are statistically significant and positive, except for one negative correlation between Implementation of the working time budget assigned to checks, and task Education and care, meaning that the inefficient time use (exceeding the time budget for checks) diminishes the completion rate of task Education and care. In the case in question the negative correlation also indicates the impact of internal audit efficiency indicators on the completion of task Education and care, since the increase of the budget implementation rate for checks causes budget overspending, which is a negative phenomenon (it is above 100%).

What is observed most often is the impact of the audit indicator Implementation of the working time budget assigned to planning and reporting on the efficiency of

priority task performance. Meanwhile in the course of research no impact of the audit recommendation acceptance rate on the performance rate of public service tasks was recorded. Later results confirmed the assertion that what impacts the performance of entities is the actual effects of recommendations issued rather than their number. Actual effects of the recommendations issued are obtained as a result of checks. The results of the above research confirm the assertion that internal audit efficiency has a positive impact on the performance of government sector entities.

5. Research Results

The research conducted helped to establish the existence of an upward trend among most efficiency indicators in internal audit units of voivodeship offices in 2009–2017. Positive changes occurred as new tools were introduced by the Ministry of Finance to measure the efficiency of the functioning of internal audit units; they consisted, among others, in linking audit planning with main risk areas within an organisation to ensure maximum benefits of conducting an audit oriented to minimising the risk within an organisation and streamlining its operations.

The results of research into the effectiveness of internal audit in voivodeship offices confirmed the positive growth dynamics of most indicators in 2009–2017, however, they revealed the need to conduct a more in-depth analysis at the stage of audit planning seeing that the hours planned for planning and reporting activities were exceeded.

It follows from the empirical research results that there is a statistically significant correlation between internal effectiveness metrics and the metrics for voivodeship offices' performance of public service tasks. Among internal audit effectiveness metrics, what has a great impact on the performance of entities is the indicator describing audit plan completion with respect to checks. The above mentioned relationship suggests a significant role of checks, which consist in monitoring and verifying the implementation of post-audit recommendations, thus ensuring an effective contribution of the audit results to streamlining an entity's operations. The rate of implementation of the time budget assigned to planning and reporting also is characterised by a statistically significantly correlation with performance rates of public service tasks, which confirms the importance of the planning stage in the auditing process. Research has also corroborated the impact of efficient performance of management control assessment tasks on the performance of voivodeship offices, namely that completing a higher number of planned tasks has a positive impact on the performance of priority public service tasks. On the other hand, research results confirm the assertion that efficient audit planning has a positive impact on the performance of public service tasks.

An analysis of internal audit added value indicators indicates they are very high and have followed a positive upward trend over the years under review. The internal audit value added variables which refer to the rate of post-audit recommendations

accepted by the entity's management and to performance of consulting activities and checks confirm the value added to the organisation. The value-added in this case will be viewed through the lens of the level of entity management's trust in audit results (average level of post-audit recommendations accepted of 95%) and that of using auditors' consulting activities at a constant level over the time horizon under review. Consulting activities as part of the audit are a very important element of support for the entity manager in performing its goals and tasks and streamlining the entity's functioning.

The empirical research results presented for the impact of value added indicators on the efficiency of government sector entities suggest that the voivodeship offices' completion rate for the State's priority tasks rises with the growth of internal audit value added indicators. Interestingly enough, the number of post-audit recommendation accepted, which is very high (95%), has no impact on the performance of public entities as regards completion of priority tasks. The above may be due to the nature of the indicator, which describes a numerical rather than qualitative measure. The qualitative reflection of the post-audit recommendations accepted is the actual effect of minimising the risks identified and of streamlining organisation's operations already at the stage of checks, as confirmed by the results of empirical research.

The analysis of research results with respect to internal audit quality indicators reveals that these indicators were high, but they still need some improvement as regards compliance with the requirements of standard 1300 – quality assurance and improvement programme as part of self-assessment and external assessment. The empirical research conducted with regard to the impact of internal audit quality on the performance of public entities lead to the conclusion that self-assessment and external assessment conducted by internal auditors as well as training plan completion have a positive impact on the completion rate of the State's public service tasks. The above confirms the assertion that there is a statistically significant correlation between internal audit quality metrics and the metrics of State administration entities' completion of public service tasks in Poland.

6. Conclusion

When considering public authorities' efforts to maintain the stability of public finance, attention should be also paid to the need for the public sector's continued performance of its core functions, i.e. allocation, distribution and stabilisation, as well as for preventing long-term public finance imbalance. This can be achieved by creating an effective system of public spending management instruments for the public finance sector. In the context of the above considerations a question arises as to whether the instruments currently applied at the national and EU level help leverage this fiscal instrument to achieve the goals included in the concept of building sustainable development. These tools are of particular significance in the period of looking for funds to combat the social and economic consequences of

COVID. Those in power, when opting to earmark an ever increasing pool of public funds to public service tasks musts create tools to assess and enhance their efficiency.

The efficiency of internal audit plays a significant role in streamlining the operations and adding value to the functioning of public administration in Poland as regards efficient public spending and public entities' completion of public service tasks. Empirical research results revealed a positive impact of internal audit efficiency indicators on the completion rate of voivodeship offices' public service tasks for the period under review. The authors successfully identified the main factors characterising the efficient functioning of the internal audit in the public sector and demonstrated their positive upward trend in the period analysed.

The role of internal audit in public administration in Poland, as presented in the paper, confirms its essence and its core operational framework. However, the implementation of respective stages of the internal audit in the public sector needs improving, especially with respect to planning audit tasks based on risks identified in the organisation being audited.

The results presented in the article are unique in terms of empirical research into the impact of internal audit efficiency on streamlining the operations of organisations in Polish public sector, which may point the direction for future scientific research in this domain.

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