

## ACCORDING TO ADMINISTRATIVE STATISTICS, HOW EFFICIENT ARE THE ADMINISTRATIVE UNITS IN SLOVENIA?

*Žiga Kotnik<sup>1</sup>, Polonca Kovač<sup>2</sup>*

### Abstract:

Analysing the performance of the public administration is a step towards the earmarked and efficient use of budgetary resources. The article analyses the efficiency of 38 selected administrative units, considering their size, over the period from 2005 to 2018, utilizing available indicators from administrative statistics. The descriptive statistics method, time series analysis, and rankings were used for the analysis. The findings indicate mixed results. The empirical results show that larger administrative units, statistically speaking, are more efficient than smaller units to some extent. Compared to medium-sized administrative units, larger administrative units have a higher average number of resolved cases per employee, lower average costs per individual administrative case, but simultaneously a lower proportion of resolved administrative cases within the legal timeframe. The practical value of the contribution lies in the information on the calculated efficiency of the individual administrative units, which enables them to compare themselves with each other, find best practises, improve the functioning of the administrative units and reduce the differences between them.

**Keywords:** public administration; administrative procedures, administrative units; performance, measuring performance

### 1. Introduction

The goal of public administration is to create a harmonious living environment, aligning with the principles of good governance (Jian-guang, 2007). The role of democratically governed public administration nowadays is constantly evolving due to rapid and continuous social changes in both economically developed countries and developing countries. Countries are confronted not with straightforward, isolated issues confined to individual countries, but rather with progressively intricate, global, and multifaceted challenges (J. Raadschelders & Vigoda-Gadot, 2015). Major changes include globalization, evident in the interdependence of economies, and the pluralization of public service provision (Robinson, 2015), which require states to continually adapt to changes and redefine the functions, tasks, and roles of the state towards citizens, the private sector, and the broader civil society.

In traditional public administration, the focus is on effectiveness and rationale, with limited public participation (Bureekul, 2005). Nowadays, good governance is crucial for effective public administration, as it promotes transparency, accountability, and citizen participation (Herasymiuk et al., 2020; Sari, 2023). The evolution of public administration has been influenced by the growing need for good governance, leading to the transition from traditional to new forms of governance (Barbier & Tenengeh, 2023). The concept of good governance is influencing the activities of public administration entities, leading to the creation of innovative legal forms and mechanisms of cooperation (Barczewska-Dziobek, 2018).

The influence of the good governance concept has extended to public administration in Eastern Europe, fostering greater collaboration and the development of novel legal frameworks (Barczewska-Dziobek, 2018). Under the umbrella of democratic governance, public administration is anticipated to demonstrate heightened accountability and adaptability to civil society's demands (Uvalle-Berrones, 2012). While the paradigm of good governance has long been acknowledged in economically advanced regions, its significance is now increasingly recognized in other parts of the globe. For instance, the application of good governance practices in public universities in Brazil has shown a need for further investment in these areas (Castro, 2016). This shift is particularly evident in South Africa, where the relationship between public administration and good governance is emphasized, with a focus on

---

<sup>1</sup> Žiga Kotnik, Assistant Professor, Faculty of Public Administration University of Ljubljana, Slovenia, ziga.kotnik@fu.uni-lj.si, orcid: 0000-0003-2723-9364.

<sup>2</sup> Polonca Kovač, Full Professor, Faculty of Public Administration University of Ljubljana, Slovenia, polonca.kovac@fu.uni-lj.si, orcid: 0000-0002-7743-0514.

leadership, transparency, and financial viability (Pillay, 2016). In Thailand, the shift towards good governance has led to a redefinition of the roles and values of public administrators (Bureekul, 2005).

In the realm of effective (good) governance, assessing performance and efficiency is crucial. It's a fundamental aspect of public administration, serving as a cornerstone for establishing this paradigm. Various social science disciplines, such as economics, political science, public administration, law, management, and entrepreneurship, tackle the concepts of performance (effectiveness) and efficiency. Yet, the specific content of these principles remains somewhat ambiguous and open to interpretation across different scientific fields. In literature, there are many different definitions of performance and efficiency, and different interpretations across scientific disciplines. The topic of effectiveness and efficiency has a lengthy historical background, extending back to at least the Aristotelian notions of causality (Rutgers & van der Meer, 2010). One of the first comprehensive overviews of the development of the concepts of effectiveness and efficiency in historical context is provided by researchers (Rutgers and van der Meer, 2010). In this regard, efficiency and performance are closely related but distinct concepts. As per the Oxford English Dictionary, *efficiency* refers to performing tasks in the most cost-effective manner, involving the ratio of output to input within a defined system, ultimately achieving the intended goal. It involves the capacity to achieve objectives while minimizing wasted time, money, or effort. Efficiency encompasses the level of success in attaining the desired outcome. *Effectiveness*, on the other hand, is the realization of the desired or anticipated outcome or success. Efficiency considers how successful something is in achieving the desired outcome, while effectiveness refers to achieving the desired or expected result or success (Stevenson, 2010). In other words, efficiency refers to the ratio of benefit to cost, often in the context of resource use (Schmidt, 2019). It is a measure of how economically resources are utilized to achieve a given level of customer satisfaction (Neely, 1995). Performance, on the other hand, encompasses both efficiency and effectiveness, with the latter referring to the extent to which customer requirements are met (Neely, 1995). In other words, in the field of economics, the examination of performance and efficiency often revolves around the correlation between inputs, outputs, and outcomes (Mandl et al., 2008). Performance is demonstrated by achieving valued results, irrespective of the implications for resources, while efficiency is evidenced by the actual results or work performed and the subsequent consequences or impacts of implemented measures (Rutgers & van der Meer, 2010). According to Ozcan (2008), performance can influence efficiency, and vice versa, with both factors significantly impacting overall performance. In most instances, this entails scrutinizing various input-output models in terms of cost-effectiveness (Rutgers & van der Meer, 2010), or as an operationalized maximization of net societal or organizational benefits. This is evident, for instance, in the analysis of labour market dynamics (Cahuc et al., 2014), energy efficiency (Linares & Labandeira, 2010), or public expenditure (Mandl et al., 2008).

In business networks, the challenge is to balance efficiency with effectiveness (Mouzas, 2006). The relationship between technical efficiency and effectiveness is crucial for sound managerial planning and decision making. The two are not always positively correlated, and both need to be measured and monitored for improved organizational performance (Sudit, 1984). As already mentioned, efficiency and performance are distinct but interrelated concepts in management. Efficiency refers to the ratio of output to input, while effectiveness is the degree to which a course of action meets desired goals (Lees, 2004). In investment management, effectiveness can be measured as the net return per unit of risk (Wagner & Banks, 1992). The challenge for companies is to balance efficiency with effectiveness in business networks (Mouzas, 2006). In project management, the quality of effort invested in both effectiveness and efficiency predicts project success (Phelan, 2005). In educational evaluation, efficiency is the work-rate of a process, while effectiveness is the quality of outcomes (Carmichael, 2002). In a technical context, effectiveness has a wider semantic field and is oriented towards results, while efficiency implies processes (Filyasova, 2019). Organizational effectiveness is whether the organization fulfils its goals, while efficiency is the ratio between inputs and outputs (Najar, 2020). In the Israeli hospitality industry, managers tend to be either effective or efficient, rather than both (Israeli, 2007). According to Drucker (1977), organizational efficiency indicates its capability to attain outcomes with minimal inputs (costs) or resource reallocations. Conversely, effectiveness, as defined by Keh et al. (2006), measures an organization's accomplishment of its predetermined objectives. In this context, effectiveness may be viewed as a precursor to efficiency, as it is preferable to achieve success with less efficiency when doing the right things, rather than efficiently performing the wrong tasks, resulting in inefficiency. Efficiency and performance find applications not only in economics but also in management and entrepreneurship. In this context, effectiveness and efficiency frequently serve as key concepts employed, among other purposes, in evaluating and quantifying organizational leadership and networks (Mouzas, 2006; J. Stare, 2006; Tomaselli, 2018), as well as in appraising work performance and fostering employee motivation (Upadhaya et al., 2014). In these fields, the term is frequently employed in accordance with the 2 x 2 matrix (Table 1) (Kotnik, 2021).

Table 1: Performance and efficiency

Striving for defined objectives/ /doing the right things	Performance	Chasing after the correct objectives, but doing so inefficiently (at a substantial expense).	Pursuing the appropriate objectives with a focus on cost efficiency or achieving a high return on investment.
	Failure	Chasing after the incorrect objectives and being inefficient (resulting in high costs and inadequate production).	Chasing misguided objectives with efficiency (yielding inadequate output at minimal expense).
		Inefficiency	Efficiency

Doing things right

Adopted from sources (Drucker, 1977; Kotnik, 2021; Kumar & Gulati, 2010)

In political science, effectiveness involves completing tasks - successful organizations are those that adequately address and solve challenges and fulfil the service requirements of other organizations or individuals. Efficiency, on the other hand, is a concept used to evaluate the procedural activities of organizations or the procedural costs incurred at various stages of public policy (Zammuto, 1982). Public policies in political science are analysed through the lenses of effectiveness and efficiency, utilizing analytical procedures (Hogwood et al., 1984), institutional analysis, examination of public policy actors, or evaluation of legitimacy concerning the (un)success and (in)efficiency of public policies or the policy process (Wallner, 2008). In the context of political science, efficiency can be interpreted as how individuals or entities tackle challenges, while effectiveness refers to their alignment with goals or their capability to address challenges meaningfully (Skogan, 1976).

In public administration, the term efficiency takes precedence, while effectiveness finds its niche in the legal domain, though it's worth noting their close kinship in meaning. In public administration, effectiveness refers to the degree of accomplishment or non-accomplishment of established objectives. It reflects the capacity of an organization, policy, program, or project to reach predetermined goals. (Kumar & Gulati, 2010; Linares & Labandeira, 2010; Mandl et al., 2008; PA Glossary of Terms, 2020). A public sector management that's both efficient and effective facilitates public discourse on governmental roles in addressing societal issues and prioritizes accountability and oversight (Kefela, 2011). Another frequently used term in administrative studies, synonymous with efficiency, is performance. It denotes the achievement of objectives at minimal costs, taking into account established facts, potential alternatives, and societal implications (Pirnat, 2004). As already mentioned in the literature (Jessop & Bevir, 2011; Kotnik, 2021; Kotnik & Kovač, 2018; Kumar & Gulati, 2010) stipulates that efficiency and performance (effectiveness) are commonly used terms in the fields of legal and administrative studies. However, their usage often involves inconsistencies or even interchangeability between the two.

In the realm of law, much like in other disciplines, the concept of legal organizational effectiveness can be delineated into multiple substantive dimensions, each open to varied interpretations (Andrews et al., 2011; Gaster & Squires, 2003; A. Stare, 2018). Here, it's essential to discern between the notions of performance and efficiency, and the concept of quality assurance, which involves overseeing (final) products or services, including their intermediate stages. Efficiency and effectiveness within legal science necessitate nuanced understanding, contingent upon whether they pertain to legislation or law enforcement, which may vary in specificity (Rose-Ackerman & Lindseth, 2010). For instance, administrative efficiency entails adherence to public administration laws (Upadhaya et al., 2014), emphasizing the implementation of public policies and legislation related to public administration, thereby ensuring alignment of the legal system with societal needs (Craig et al., 2017; Pavčnik, 2019). Deviations prompt the legal-regulatory feedback loop to enact appropriate legislative changes. Moreover, the efficiency of administrative units (performance of administrative units) encompasses the execution of sector-specific public policies through regulatory frameworks delineating competencies and objectives in sector-specific procedures (Kovač & Kotnik, 2018). In context of our empirical research, efficiency in public administration refers to the capacity to attain results and objectives while minimizing resource inputs (costs) or reallocating them, considering established facts, potential alternatives, and societal repercussions.

Furthermore, especially in Eastern Europe, evaluating the performance of public administration is often reduced to a cliché, lacking specific and empirical assessment. This absence of a comprehensive approach results in superficial or principle-based descriptions from those in charge and external professionals. In recent decades,

numerous endeavours have aimed to enhance efficient governance and consequently optimize public spending (Kefela, 2011; J. C. N. Raadschelders, 2011; Upadhaya et al., 2014; Wallner, 2008).

Assessing the efficiency of public administration organisations, including administrative units, stands as a cornerstone of effective public governance. Extensive empirical research in the literature delves into examining the efficiency of administrative units. For example, research on the efficiency of administrative units in Slovenia has yielded mixed results. Researcher (Pevcin, 2013) found that the average technical efficiency of Slovenian municipalities is around 22-25% above the estimated best-practice frontier, suggesting a relatively high level of efficiency. Slovenian municipalities exhibit an average technical efficiency that is significantly above the estimated best-practice frontier, indicating room for improvement through consolidation and increased efficiency. However, authors (Černenko, 2017; Pevcin, 2017) both highlighted the need for municipal consolidation to improve efficiency, with the latter noting that only a limited number of very small municipalities are experiencing economies of scale. Researcher (Pevcin, 2017) also found out that municipal amalgamation could lead to cost reduction, efficiency improvement, and quality enhancement; small municipalities experience economies of scale, but on a limited scale. Moreover, focusing on organisational efficiency in public administration organisation, authors (Đaňková et al., 2017; Marišová et al., 2021) emphasized the importance of effective personal management and process optimization in public administration, respectively. Further, authors (Marišová et al., 2021) demonstrate the identification of insufficient personal management in the building sector due to low financing and the conclusion that reverting to state administration in Slovakia would not be effective. Authors (Đaňková et al., 2017) further confirmed the existence of the correlation between process efficiency in town office sections and the overall efficiency of self-government processes, as well as the significant role of managers in considering the entire town office in their duties. Further, researchers (Prebilič & Bačlija, 2013) focused on the administrative capacity of Slovenian municipalities, with the former noting the lack of a general policy on quality and the latter evaluating the administrative capacities of individual municipalities. The main findings include presenting the results of an empirical research project on administrative capacity among directors of Slovenian municipal administrations in 2007 and 2012, as well as evaluating municipal administrative capacities using the Administrative Capacity Index (ACI).

The objective of this article is to identify actions aimed at facilitating future monitoring and enhancement of administrative units and the overall administration, relying on comparable and relatively objective indicators. The analysis presented here aims to evaluate Slovenian administrative units efficiency using selected indicators of administrative statistics. It seeks to assess how administrative units perform in relation to the parties involved in administrative procedures, particularly in terms of meeting legally mandated deadlines and other formal statistical measures of "productivity". In Slovenia, administrative statistics are governed by the General Administrative Procedure Act (Official Gazette of RS, No. 80/99 and amendments; APA) and the Rules on the Keeping of Records of Administrative Procedure (Official Gazette of RS, No. 18/03 and 7/06; Rules). However, it's important to note that this legislative framework is just one aspect of broader considerations related to performance, efficiency, and effectiveness. Other factors include political legitimacy, regulatory optimality, and organizational and resource management issues (Pirnat, 1993, pp. 141; see also (Kovač & Virant, 2011)). The research problem thus relates to the analysis of the system of administrative statistics in the light of the principles of good governance. One hypothesis was tested, namely:

“Medium-sized administrative units are less efficient than large administrative units.”

Administrative statistics indicators employed to assess the performance of administrative units are the following, namely: (i) the ratio between the number of all resolved cases and the total number of employees; (ii) the ratio between costs and the number of all resolved cases; (iii) the ratio of all resolved cases to the total number of employees.

The first efficiency indicator, as identified by studies from authors (Kovač & Kotnik, 2018), quantifies the ratio between the total resolved cases (an administrative statistics metric) and the overall number of employees (statistical data). The second efficiency indicator, as defined by authors (Setnikar-Cankar et al., 2009; Žurga, 2000), calculates the ratio between total expenditures on salaries and material costs (utilized resources) and the total number of resolved cases (outcome). This indicator illustrates the efficiency of budgetary spending or the cost-effectiveness of administrative units. The third efficiency indicator for administrative units is inherently a metric of administrative statistics. It is defined as the ratio between the number of administrative cases resolved within the legal timeframe and the total number of resolved administrative cases (Ministry of Public Administration, 2023). This indicator reflects the proportion of administrative cases resolved within the legal timeframe and assesses adherence to principles of legality and timely processing (Virant, 2009).

## 2. Methodology

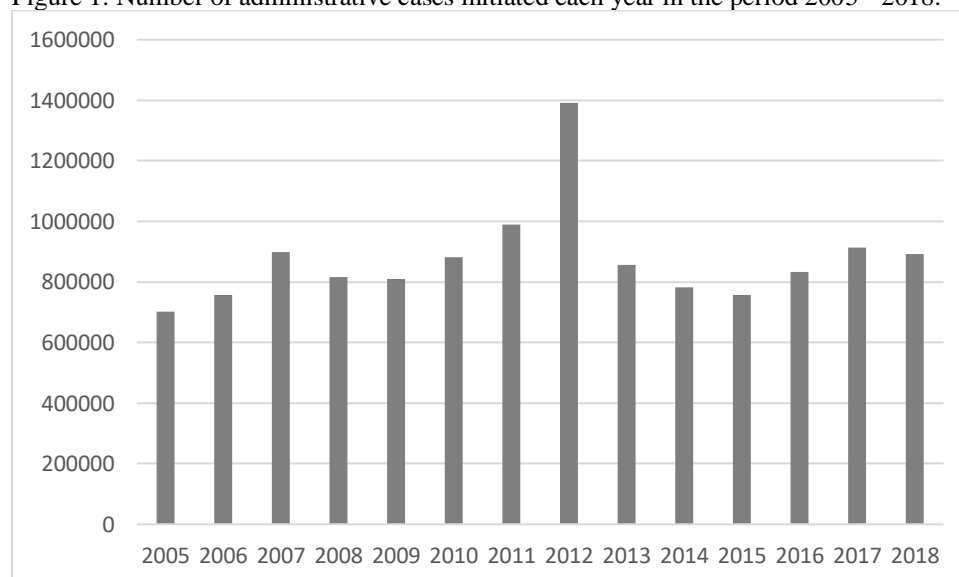
The article undertakes an examination of the efficiency of 38 administrative units. Examining into a span of years from 2005 to 2018, the analysis evaluates these units' performance, taking into account their varying sizes. Administrative units are categorized into small, medium-sized, and large based on population size: small units encompass up to 18.000 inhabitants, medium-sized units range from 18.000 to 50.000 inhabitants, and large units consist of over 50.000 inhabitants (Ministry of Public Administration, 2023). Small administrative units represent 14% of Slovenia's total population, while medium-sized units cover 36%. Large units, including the Ljubljana Administrative Unit as the biggest Administrative Unit, account for 50% of the population. In Slovenija there are 10 large administrative units, 28 medium-sized and 20 small administrative units. The following analysis includes 28 medium-sized and 10 large administrative units.

To offer a response to the initially posited hypotheses regarding the efficiency of selected administrative units as key entities in public administration concerning stakeholders in administrative procedures, a quantitative research methods were employed (Kovač & Kotnik, 2018). Combining descriptive statistics, time series analysis, and rankings, the study provides a comprehensive examination of the efficiency dynamics within these administrative entities. The administrative units' data were analysed in Microsoft Excel 2023. Statistical findings informed the evaluation and proposed improvement using a qualitative axiological-deontological method. This integrated approach ensured greater reliability and validity. Good governance and administration principles must be harmonized to avoid conflicts and prioritize legality over economy. Monitoring both qualitative and quantitative results is essential to achieve desired performance and align quantitative outcomes with administrative objectives.

## 3. Results

This section presents empirical results of data analysed.

Figure 1: Number of administrative cases initiated each year in the period 2005 - 2018.



Source: Content reports regarding the activities of administrative units spanning from 2005 to 2018. (MPA, 2020).

Figure 1 depicts the total number of administrative cases commenced by administrative units for resolution in each individual calendar year spanning from 2005 to 2018. Considerably fluctuating is the number of initiated administrative cases, making it impossible to assert a consistent rise or fall. It is evident that the number of administrative cases fluctuates between 65.000 and 1.400.000 per year. The count of administrative cases varies over the years, peaking in 2012. Subsequently, there was a decline in the number of administrative cases, reaching a new low in 2015. Since then, the number of administrative cases has gradually increased once again. These variations stem from legislative changes, such as the expiry of driver's licenses issued on the three-part pink form, the termination of the Building Act, and the introduction of the Building Act. These adjustments lead to shifts in both the volume and intricacy of administrative procedures and the jurisdiction of administrative units. The count of initiated administrative cases does not encompass either pending cases from the previous calendar year or cases sent back for review following a ruling by a higher-level authority or administrative/constitutional court.

In the following, we present the results of an empirical analysis aimed at assessing the effectiveness of administrative units, using the following indicators: (i) the ratio between the number of all resolved cases and the total number of employees; (ii) the ratio between costs and the number of all resolved cases; and (iii) the ratio of all resolved cases to the total number of employees.

(i) The ratio between the number of all resolved cases and the total number of employees.

The primary efficiency indicator, as discerned through investigations conducted by authors (Kovač & Kotnik, 2018), involves the calculation of the ratio between the aggregate number of resolved cases (an administrative statistics metric) and the total count of employees (statistical data). This indicator serves as a pivotal measure to evaluate the productivity and operational effectiveness of administrative units, shedding light on the workforce's capacity to manage and resolve cases efficiently. By assessing the relationship between case resolution rates and staffing levels, organizations can gauge their performance and identify potential areas for optimization and enhancement.

Table 2: The average annual number of resolved cases per employee in the period from 2005 to 2018.

Administrative unit	Average	Rank	Administrative unit	Average	Rank
Ljubljana	1679.03	1	Krško	1149.47	20
Domžale	1579.99	2	Žalec	1148.54	21
Celje	1546.39	3	Brežice	1142.34	22
Koper	1502.17	4	Slovenska Bistrica	1132.03	23
Maribor	1487.15	5	Tolmin	1129.90	24
Ptuj	1446.44	6	Slovenske Konjice	1117.23	25
Kranj	1398.19	7	Radovljica	1112.78	26
Postojna	1349.45	8	Šmarje pri Jelšah	1105.26	27
Šentjur pri Celju	1346.91	9	Sežana	1102.55	28
Novo mesto	1329.46	10	Trebnje	1081.61	29
Murska Sobota	1320.26	11	Lenart	1069.23	30
Kamnik	1314.8	12	Gornja Radgona	1060.6	31
Slovenj Gradec	1278.12	13	Črnomelj	1035.8	32
Jesenice	1262.81	14	Pesnica	1028.2	33
Grosuplje	1260.36	15	Litija	1002.0	34
Velenje	1246.74	16	Škofja Loka	981.65	35
Nova Gorica	1202.52	17	Ravne na Koroškem	979.72	36
Ajdovščina	1190.72	18	Sevnica	906.36	37
Vrhnika	1160.03	19	Lendava	857.67	38

Source: own elaboration.

Note: Large-sized administrative units are coloured grey, while medium-sized administrative units are in white colour.

The results of empirical analysis (Table 2) clearly indicate that large administrative units annually resolve more cases per employee in the period from 2005 to 2018 compared to medium-sized administrative units. The average number of resolved cases per officer in large administrative units during this period amounts to 1498.44 cases per officer, while the number of resolved cases per officer in medium-sized administrative units stands at 1127.66 resolved cases per officer. Arranged data in descending order also show that large administrative units occupy ranks from 1 to 7, as well as ranks 10, 11, and 17. Medium-sized administrative units hold ranks 8-10, 12-16, and 18-38 in descending order. In this regard, based on the indicator "The ratio between the number of all resolved cases and the total number of employees," we can confirm hypothesis 1, which states: "Medium-sized administrative units are less efficient than large administrative units."

(ii) The ratio between costs and the number of all resolved cases.

The second efficiency indicator, as articulated by researchers (Setnikar-Cankar et al., 2009; Žurga, 2000), entails computing the ratio between the aggregate expenditures incurred on salaries and material costs (representing utilized resources) and the total number of resolved cases (reflecting outcomes). This metric serves to delineate the efficiency of budget allocation or the cost-effectiveness of administrative units, providing insights into the management of financial resources relative to the achieved outcomes.

Administrative units are categorized as autonomous entities in budgetary terms, receiving allocated funds for their operational needs through the approved budgetary framework. These funds are specifically designated and channelled into a distinct sub-account within the consolidated treasury system managed by the Public Payments Administration of the Republic of Slovenia, as outlined by Anželj (Anželj, 2021). Notably, one of the primary financial commitments of administrative units revolves around covering expenses related to employee salaries and material resources, as highlighted in the report by the Ministry of Public Administration (MPA, 2020). This financial arrangement underscores the structured financial management practices essential for the effective functioning of administrative entities within the governmental framework.

Initially, the calculation involved determining the ratios between the aggregate expenses incurred on salaries and material costs and the total number of resolved cases spanning the years 2005 to 2018 for each administrative unit. These ratios serve as a measure of the cost incurred per resolved case. Subsequently, utilizing the outcomes of these computations, the administrative units were systematically arranged in ascending order, ranging from the most to the least cost-effective. It's imperative to recognize that a lower cost per resolved case indicates that an administrative unit expends fewer resources to address each case, thereby exemplifying greater cost-effectiveness. The comprehensive results derived from these analyses are meticulously presented in the subsequent table (Table 3), meticulously delineating the ascending ranking within each grouping of administrative units.

Table 3: The average cost per resolved case in the period from 2005 to 2018.

Administrative unit	Average	Rank	Administrative unit	Average	Rank
Lendava	27.98	1	Slovenska Bistrica	22.51	20
Ravne na Koroškem	27.83	2	Krško	22.32	21
Sevnica	27.77	3	Šentjur pri Celju	21.41	22
Škofja Loka	26.72	4	Nova Gorica	21.31	23
Litija	26.47	5	Grosuplje	21.18	24
Črnomelj	26.28	6	Novo mesto	21.13	25
Lenart	24.91	7	Kamnik	20.95	26
Trebnje	24.90	8	Jesenice	20.86	27
Radovljica	24.85	9	Velenje	20.55	28
Gornja Radgona	24.79	10	Kranj	20.33	29
Vrhnika	24.43	11	Murska Sobota	20.00	30
Šmarje pri Jelšah	24.35	12	Slovenj Gradec	20.00	31
Slovenske Konjice	24.20	13	Celje	18.43	32
Pesnica	24.09	14	Postojna	17.97	33
Brežice	23.55	15	Domžale	17.90	34
Sežana	22.93	16	Koper	17.76	35
Ajdovščina	22.93	17	Ptuj	17.51	36
Tolmin	22.61	18	Maribor	16.61	37
Žalec	22.52	19	Ljubljana	15.98	38

Source: own elaboration.

Note: Large-sized administrative units are coloured grey, while medium-sized administrative units are in white colour. Notably, data for the years 2005, and 2006 were originally provided in Slovenian Tolars (SIT), necessitating their conversion using the exchange rate of 1 € = 239.64 SIT.

The results of the empirical analysis (Table 3) clearly indicate that, in the period from 2005 to 2018, medium-sized administrative units annually exhibited a higher average cost per resolved case compared to large administrative

units. Specifically, the average cost per resolved case in large administrative units during this period amounted to 17.93 EUR, whereas in medium-sized administrative units, it stood at 23.40 EUR per resolved case. Furthermore, when examining the data in descending order, it becomes evident that large administrative units occupied ranks 23, 25, 29, 30, 32 and 34 to 38, while medium-sized administrative units held ranks 1 to 22, 24, 26 to 28, 31 and rank 33 in descending order. Given that a higher average cost per resolved case indicates lower efficiency, and drawing from the indicator "The ratio between costs and the number of all resolved cases," we can confidently confirm hypothesis 1, which asserts: "Medium-sized administrative units are less efficient than large administrative units."

(iii) The ratio of all resolved cases to the total number of employees.

The third efficiency indicator pertinent to administrative units serves as an intrinsic metric within administrative statistics. It is precisely defined as the ratio between the count of administrative cases resolved within the prescribed legal timeframe and the overall number of resolved administrative cases, as outlined by the Ministry of Public Administration (2023). This indicator captures the proportion of administrative cases successfully addressed within the designated legal parameters, thereby offering a comprehensive assessment of compliance with principles of legality and timely processing, as underscored by Virant (2009). Evaluating this indicator allows for a nuanced understanding of an administrative unit's performance in meeting legal requirements and fulfilling its responsibilities within stipulated timeframes, contributing to the overall of administrative operations.

In other words, this indicator measures the efficiency of administrative units beyond just the volume of work completed. It includes cases resolved within the legal timeframe, determined either through an abbreviated or special procedure, as outlined by the Ministry of Public Administration (MPA, 2020). The total number of resolved cases encompasses those within the legal timeframe and those resolved after exceeding the legal deadline. The empirical results for the indicator "the ratio of all resolved cases to the total number of employees" are presented next (Table 4).

Table 4: Average percentage of resolved administrative cases within the legal timeframe in the period from 2005 to 2018.

Administrative unit	Average	Rank	Administrative unit	Average	Rank
Slovenj Gradec	99.99%	1	Celje	99.76%	20
Velenje	99.98%	2	Radovljica	99.75%	21
Postojna	99.98%	3	Slovenske Konjice	99.73%	22
Šmarje pri Jelšah	99.97%	4	Kranj	99.72%	23
Brežice	99.97%	5	Škofja Loka	99.71%	24
Krško	99.97%	6	Črnomelj	99.70%	25
Sevnica	99.96%	7	Ptuj	99.58%	26
Trebnje	99.93%	8	Litija	99.57%	27
Gornja Radgona	99.92%	9	Nova Gorica	99.56%	28
Žalec	99.92%	10	Vrhnika	99.51%	29
Ravne na Koroškem	99.92%	11	Jesenice	99.44%	30
Pesnica	99.91%	12	Maribor	99.44%	31
Grosuplje	99.90%	13	Slovenska Bistrica	99.38%	32
Tolmin	99.90%	14	Murska Sobota	99.32%	33
Domžale	99.90%	15	Koper	99.21%	34
Lenart	99.89%	16	Novo mesto	99.21%	35
Šentjur pri Celju	99.87%	17	Sežana	98.93%	36
Lendava	99.82%	18	Ajdovščina	98.80%	37
Kamnik	99.77%	19	Ljubljana	97.93%	38

Source: own elaboration.

Note: Large-sized administrative units are coloured grey, while medium-sized administrative units are in white colour.



The findings from the empirical analysis (Table 4) reveal that medium-sized administrative units consistently demonstrated a marginally higher average percentage of resolved administrative cases compared to their larger counterparts in the period spanning from 2005 to 2018. Specifically, the average percentage of resolved administrative cases within the legal timeframe in large administrative units stood at 98.94%, while in medium-sized administrative units, it was slightly higher at 99.75%. Additionally, upon closer examination of the data in descending order, it is apparent that medium-sized administrative units occupied ranks ranging from 1 to 14, 16 to 19, 21-22, 24-25, 27, 29-30, 32, ranks 36 and 37. Conversely, large administrative units held ranks 20, 23, 26, 28, 31, 33-35, and rank 38 in descending order. Since a higher average percentage of resolved administrative cases within the legal timeframe indicates greater efficiency, and drawing from the indicator "The ratio of all resolved cases to the total number of employees," we can not, statistically speaking, confirm hypothesis 1, which states: "Medium-sized administrative units are less efficient than large administrative units."

## 4. Conclusion

This study explores the efficiency of 38 administrative units from 2005 to 2018. Utilizing administrative statistics indicators and analytical methods, including descriptive statistics and rankings, the efficiency of selected administrative units was assessed. Empirical findings suggest that, statistically speaking, larger administrative units exhibit a degree of efficiency superior to smaller units, albeit to a certain extent. Large administrative units consistently resolve more cases per employee compared to medium-sized units. Large units handle an average of 1498.44 cases per officer, while medium-sized units manage 1127.66 cases per officer. Rankings also support this, with large units dominating the top positions. The empirical analysis further demonstrates that medium-sized administrative units had a higher average cost per resolved case compared to large units. Large units averaged 17.93 EUR per case, while medium-sized units spent 23.40 EUR. Rankings also support this, with large units occupying lower positions. Moreover, the empirical analysis for the third efficiency indicator for administrative units that measures the ratio of administrative cases resolved within the legal timeframe to the total resolved cases, demonstrate that, medium-sized administrative units consistently had a slightly higher average percentage of resolved cases within the legal timeframe compared to larger units. Large units averaged 98.94%, while medium-sized units were slightly higher at 99.75%. Medium-sized units also ranked higher in descending order, supporting their efficiency.

The empirical findings suggest that, statistically speaking, larger administrative units exhibit a higher degree of efficiency compared to smaller ones. In comparison to medium-sized administrative units, larger counterparts demonstrate higher averages of resolved cases per employee and lower average costs per individual administrative case. However, they also exhibit a lower proportion of resolved administrative cases within the legal timeframe. Therefore, based on the empirical analysis of the three indicators of administrative statistics, we can partially confirm the hypothesis that "Medium-sized administrative units are less efficient than large administrative units."

Administrative statistics serves as a useful tool for monitoring administrative unit performance and decision-making in administrative procedures. However, it has drawbacks that affect the accuracy of our efficiency indicators. For instance, before analysing administrative statistics, the classification of administrative units based on population size may be problematic. For example, the Ljubljana administrative unit has a population 2.6 times larger than the second-largest administrative unit, Maribor. Furthermore, administrative statistics frequently depict administrative issues solely through numerical data, failing to capture the nuances of their type and complexity. Consequently, this disparity renders administrative procedures incomparable.

Efficiency is a fundamental good governance principle of modern public administration, thus deserving greater attention both in practice and academia. If administrative statistics - as a tool for measuring efficiency - are managed selectively, it will have a counterproductive effect on the development of good governance. Hence, it is crucial to carefully select relevant indicators from administrative statistics and consistently monitor and update them.

## Acknowledgment

The authors acknowledge the financial support received from the Slovenian Research Agency (research core funding No. P2-0426 and P5-0093). The present study represents an expansion upon the preliminary findings, which are partly based on the research conducted by Ms. Urša Zabukovec, under the mentorship of Assistant Professor Žiga Kotnik, from the Faculty of Public Administration, University of Ljubljana. We express our gratitude to Ms. Urša Zabukovec for her collaboration in preparing the materials.

## References

- Andrews, R., Boyne, G., & Walker, R. M. (2011). The impact of management on administrative and survey measures of organizational performance. *Public Management Review*, 13(2), 227–255.
- Anželj, D. (2021). Primerjava organiziranosti delovanja in financiranja upravnih enot in policijskih postaj. In G. Meško in I. Kokoravec (eds.), *Policijsko delo v skupnosti in zagotavljanje varnosti v lokalnih skupnostih: Konferenčni zbornik* (pp. 39–54). Univerzitetna založba Univerze v Mariboru. <https://doi.org/10.18690/978-961-286-534-4>.
- Barbier, L., & Tengeh, R. K. (2023). Literature Review of Public Administration and Good Governance from 1890 to 2023. *Journal Transformative*, 9(1), 43–65. <https://api.semanticscholar.org/CorpusID:257796402>
- Barczewska-Dziobek, A. (2018). Wpływ koncepcji good governance na sposób działania administracji publicznej w Polsce – zarys problematyki. *Roczniki Nauk Prawnych*, 28(1), 151–166. <https://api.semanticscholar.org/CorpusID:150313461>
- Bureekul, T. (2005). Good Governance as a New Way of Public Administration: Perspectives from Thailand. *Asia-Pacific Social Science Review*, 5(1), 21. <https://api.semanticscholar.org/CorpusID:152409692>
- Cahuc, P., Carcillo, S., & Zylberberg, A. (2014). *Labor economics*. Cambridge: MIT press.
- Carmichael, R. (2002). Measures of efficiency and effectiveness as indicators of quality: A systems approach. *Journal of Institutional Research Southeast Asia (JIRSEA)*, 1(1), 3–14. <https://api.semanticscholar.org/CorpusID:7713535>
- Castro, C. J. (2016). *Analysis of adherence of management reports to good governance practices applied to the public sector: A study in five federal public universities*. Ph.D. diss. Universidade Federal Fluminense (RIUFF). <https://api.semanticscholar.org/CorpusID:159654763>
- Černěňko, T. (2017). Effectiveness of administrative services in Slovakia. *Engines of urban and regional development. Central European conference in regional science-CERS. Engines of urban and regional development: conference proceedings: 6th central European conference in regional science*. <https://api.semanticscholar.org/CorpusID:255851167>
- Craig, P. P., Hofmann, H., Schneider, J.-P., & Ziller, J. (2017). *ReNEUAL model rules on EU administrative procedure*. Oxford: Oxford University Press.
- Đaňková, A., Čepelová, A., & Koreňová, D. (2017). Process efficiency of local self-government in Slovak Republic. *The Journal of International Studies*, 10(2), 309–317. <https://api.semanticscholar.org/CorpusID:55349647>
- Drucker, P. F. (1977). *An introductory view of management: Instructor's manual*. New York: Harper's College Press.
- Filyasova, Y. A. (2019). Effectiveness vs. Efficiency: An analysis of valency and collocability in a technical context. *RUDN Journal of Language Studies, Semiotics and Semantics*, 10(1), 187–196. <https://api.semanticscholar.org/CorpusID:196183347>
- Gaster, L., & Squires, A. (2003). *Providing quality in the public sector. A Practical Approach to Improving Public*. Philadelphia: McGraw-Hill House.
- General Administrative Procedure Act, Official Gazette of RS, Nos 80/99, 70/00, 52/02, 73/04, 22/05, 119/05, 105/06-ZUS-1, 126/07, 65/08, 8/10, 82/13).
- Herasymiuk, K., Martselyak, O. V., Kirichenko, Y. N., Zhmur, N. V., & Shmalenko, I. I. (2020). Principles of Integrity and Good Governance in Public Administration. *International Journal of Management*, 11(4), 545–555. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3601652](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3601652)
- Hogwood, B. W., Gunn, L. A., & Archibald, S. (1984). *Policy analysis for the real world..* Oxford: Oxford University Press.
- Israeli, A. A. (2007). Effectiveness and efficiency of managers: Are they doing what they can or all they can? *Tourism Economics*, 13(2), 181–195. <https://api.semanticscholar.org/CorpusID:154721706>
- Jessop, B., & Bevir, M. (2011). *The SAGE Handbook of Governance*. London: SAGE.
- Jian-guang, G. (2007). From Public Service to Public Governance. *Journal of Shanghai Jiaotong University*. <https://api.semanticscholar.org/CorpusID:159768171>
- Kefela, G. (2011). Good governance enhance the efficiency and effectiveness public spending -Sub Saharan countries, *African Journal of Business Management*, 5(11), 3995–3999.
- Keh, H. T., Chu, S., & Xu, J. (2006). Efficiency, effectiveness and productivity of marketing in services. *European Journal of Operational Research*, 170(1), 265–276.
- Kotnik, Ž. (2021). Efficiency and effectiveness of public administration democratic governance. In Janez STARE, Mirko PEČARIČ (eds.), *Academic book collection Upravna misel [The science of public administration]* (pp. 447–467). Ljubljana: Faculty of Public Administration.
- Kotnik, Ž., & Kovač, P. (2018). Development of Public Administration and Governance in Central and Eastern Europe: Content Analysis of The NISPAcee Journal. *NISPAcee Journal of Public Administration & Policy*, 11(1), 229–252.

- Kovač, P., & Kotnik, Ž. (2018). Performance of authorities in administrative procedures: Lessons from statistical data. *Hrvatska i Komparativna Javna Uprava: Časopis Za Teoriju i Praksu Javne Uprave*, 18(4), 531–555.
- Kovač, P., & Virant, G. (2011). Kovač, P., & Virant, G. (Eds.). *The development of Slovenian public administration 1991–2011 [Razvoj slovenske javne uprave 1991–2011]*. Ljubljana, Slovenia: Official Gazette of the Republic of Slovenia.
- Kumar, S., & Gulati, R. (2010). Measuring efficiency, effectiveness and performance of Indian public sector banks. *International Journal of Productivity and Performance Management*, 59(1), 51–74.
- Lees, M. (2004). Maintaining Effectiveness While Chasing Efficiency. *Healthcare Management Forum*, 17, 36–37. <https://api.semanticscholar.org/CorpusID:7439974>
- Linares, P., & Labandeira, X. (2010). Energy efficiency: Economics and policy. *Journal of Economic Surveys*, 24(3), 573–592.
- Mandl, U., Dierx, A., & Ilzkovitz, F. (2008). *The effectiveness and efficiency of public spending*. Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. <https://EconPapers.repec.org/RePEc:euf:ecopap:0301>
- Marišová, E., Lichnerová, I., & Machyniak, J. (2021). *Efficiency of the functioning of public administration: Regional empirical study*. <https://api.semanticscholar.org/CorpusID:236362795>
- Ministry of Public Administration. (2023). *Comprehensive Report on the Work of Administrative Units for the Year 2019. Ministry of Public Administration. [Vsebinsko poročilo o delu upravnih enot za leto 2018]*. <https://www.gov.si/drzavni-organi/ministrstva/ministrstvo-za-javno-upravo/o-ministrstvu/sluzba-za-upravne-enote/>
- Mouzas, S. (2006). Efficiency versus effectiveness in business networks. *Journal of Business Research*, 59(10–11), 1124–1132.
- MPA. (2020). *Ministry of Public Administration. Annual reports on the work of administrative units in the years 2004–2018 [Poslovno poročilo o delu upravnih enot za leto 2018]*. Ministry of Public Administration, Slovenia. <https://www.gov.si/drzavni-organi/ministrstva/ministrstvo-za-javno-upravo/o-ministrstvu/sluzba-za-upravne-enote/>
- Najar, B. W. (2020). Efficiency and/or Effectiveness in Managing Organizations. *Journal of Education and Culture*, 4(2), 131–138. <https://api.semanticscholar.org/CorpusID:229105479>
- Ozcan, Y. A. (2008). *Health care benchmarking and performance evaluation*. New York: Springer.
- PA Glossary of Terms. (2020). *Public Administration Glossary of Terms*. Public Administration Glossary of Terms. <https://iaslhe.files.wordpress.com/2010/01/glossary-of-pa-terms.pdf>
- Pavčnik, M. (2019). *Teorija prava: Prispevek k razumevanju prava. 5. Pregledana in dopolnjena izdaja*. Ljubljana: GV založba.
- Pevcin, P. (2014). Costs and Efficiency of Municipalities in Slovenia. *Lex Localis-Journal of Local Self-Government*, 12(3), 531–543. <https://api.semanticscholar.org/CorpusID:154728954>
- Pevcin, P. (2017). The evidence on the existence of economies Of scale in local government units. *KnE Social Sciences*, 1, 379–384. <https://api.semanticscholar.org/CorpusID:55965711>
- Phelan, T. (2005). The impact of effectiveness and efficiency on project success. *A Unifying Discipline for Melting the Boundaries Technology Management*, 381–391. <https://api.semanticscholar.org/CorpusID:2909877>
- Pillay, P. (2016). *The relationship between public administration and good governance: The case of South Africa*. <https://api.semanticscholar.org/CorpusID:55375516>
- Pirnat, R. (1993). *Efficiency of the administrative system [Učinkovitost upravnega sistema]*. In Godec, R. (Ed.), *Administrative Proceedings [Upravni zbornik]*, (pp. 141–154). Ljubljana, Slovenia: PA Institute at the Faculty of Law.
- Pirnat, R. (2004). Comments on Public Administration Acts [Komentar zakonov s področja uprave] (ZJU, ZDU-1, ZSPJS, ZJA, ZIN). Ljubljana: Institute of Public Administration at the Faculty of Law of Ljubljana.
- Prebilič, V., & Bačlija, I. (2013). Dynamics of Administrative Capacity in Slovenian Municipal Administrations. *Lex Localis-Journal of Local Self-Government*, 11(3).
- Raadschelders, J. C. N. (2011). *Public Administration: Interdisciplinary Study of Government*. Oxford: Oxford University Press.
- Raadschelders, J., & Vigoda-Gadot, E. (2015). *Global dimensions of public administration and governance: A comparative voyage*. Hoboken, New Jersey: John Wiley & Sons.
- Robinson, M. (2015). *From old public administration to the new public service: Implications for public sector reform in developing countries*. UNDP Global Centre for Public Service Excellence.
- Rose-Ackerman, S., & Lindseth, P. L. (2010). *Comparative administrative law*. Cheltenham, UK: Edward Elgar Publishing.
- Rutgers, M. R., & van der Meer, H. (2010). The origins and restriction of efficiency in public administration: Regaining efficiency as the core value of public administration. *Administration & Society*, 42(7), 755–779.

- Rules on the Keeping of Records of Administrative Procedure, Official Gazette of RS, No. 18/03 and 7/06.
- Sari, A. (2023). The Impact of Good Governance on the Quality of Public Management Decision Making. *Journal of Contemporary Administration and Management*, 1(2), 39–46, <https://api.semanticscholar.org/CorpusID:260895233>
- Setnikar-Cankar, S., Klun, M., Pevcin, P., Aristovnik, A., & Andoljšek, Ž. (2009). *Ekonomika javnega sektorja s proračunskim financiranjem*. Univerza v Ljubljani, Fakulteta za upravo.
- Skogan, W. G. (1976). Efficiency and effectiveness in big-city police departments. *Public Administration Review*, 36(3), 278–286.
- Stare, A. (2018). *Projektni management: Teorija in praksa*. Ljubljana: Agencija Poti.
- Stare, J. (2006). Model of effective leadership in public administration. *Central European Public Administration Review*, 4(2–3), 75–96.
- Stevenson, A. (2010). *Oxford dictionary of English*. Oxford: Oxford University Press.
- Sudit, E. F. (1984). Efficiency and Effectiveness. In E. F. Sudit (Ed.), *Productivity Based Management* (pp. 39–49). Springer Netherlands. [https://doi.org/10.1007/978-94-011-9667-3\\_3](https://doi.org/10.1007/978-94-011-9667-3_3)
- Tomaselli, K. G. (2018). Perverse incentives and the political economy of South African academic journal publishing. *South African Journal of Science*, 114(11/12), 40–45. Elsevier Scopus. <https://doi.org/10.17159/sajs.2018/4341>
- Upadhaya, B., Munir, R., & Blount, Y. (2014). Association between performance measurement systems and organisational effectiveness. *International Journal of Operations & Production Management*, 34(7), 853–875.
- Uvalle-Berrones, R. (2012). Public administration in the imperatives of democratic governance. *Convergencia-Revista De Ciencias Sociales*, 19, 111–144. <https://api.semanticscholar.org/CorpusID:147632044>
- Virant, G. (2009). *Javna uprava*. Ljubljana: Univerza v Ljubljani, Fakulteta za upravo.
- Wagner, W. H., & Banks, M. A. L. (1992). *Increasing Portfolio Effectiveness Via Transaction Cost Management*, 19(1), 6–11, <https://api.semanticscholar.org/CorpusID:154635971>
- Wallner, J. (2008). Legitimacy and public policy: Seeing beyond effectiveness, efficiency, and performance. *Policy Studies Journal*, 36(3), 421–443.
- Zammuto, R. F. (1982). *Assessing organizational effectiveness: Systems change, adaptation, and strategy*. Albany: Suny Press.
- Žurga, G. (2000). Spremljanje delovanja organizacij v javni upravi. *Teorija in Praksa*, 37(2), 330–347.