From Budget to Benefits on Public Services: An Empirical Study in South Sulawesi

Jefri Sumarga* and Mursalim Nohong

Hasanuddin University, Makassar, Indonesia
*sumargaj24a@student.unhas.ac.id

Abstract. This study examines the effect of the Regional Financial Management Index (IPKD) on the Public Service Index (IPP) in 24 districts and cities in South Sulawesi Province using panel data from 2023-2024. Based on New Public Management theory, this investigation fills a research gap that shows inconsistencies in previous works on the correlation between regional financial management and public service quality. Using fixed effects regression with robust standard errors, this study results that the IPKD exerts a statistically significant positive influence on the IPP ($\beta = 0.0187$, $p < 0.01$), meaning that every 1-point increase in the IPKD increases the IPP by 0.0187 points. The results are robust across various model specifications and sensitivity tests. The study's results have important benefit for fiscal decentralization policies in Indonesia, particularly in the context of improving the financial management capacity of local governments to deliver quality public services. The study's main limitation is its use of only two years of data (2023–2024), which constrains analysis of long-term and dynamic effects.

Keywords: Local Financial Management Index, Public Service Index, Local Government, New Public Management, Fiscal Decentralization.

1 Introduction

The practice of regional autonomy under Indonesia's decentralization policy since 2001 has changed the paradigm of governance from centralized to decentralized. This fundamental change has given local governments broad authority to manage resources and administer government affairs, including the provision of public services. In this context, regional financial management capacity has become a crucial factor in determining the success of local governments in providing quality public services.

Effective regional financial management not only reflects the ability of local governments to plan, implement, and account for the use of budgets, but also serves as a prerequisite for optimizing resource allocation to meet community needs. The Ministry of Home Affairs (Kemendagri), through Regulation No. 19 of 2020 concerning Guidelines for Regional Financial Management, has established the Regional Financial Management Index (IPKD) as an instrument for evaluating the quality of fiscal management at the regional government level. The IPKD comprehensively measures the quality of regional financial management, covering whole aspect of regional finances [1].

M. Nohong et al. (eds.), *Proceedings of the 10th International Conference on Accounting, Management, and Economics (10th ICAME 2025)*, Advances in Economics, Business and Management Research 388,
https://doi.org/10.2991/978-94-6239-709-5_122

Furthermore, Kemenpan-RB developed the Public Service Index (IPP) as a tool to measure the effectiveness and reliability of public service delivered by government agencies to the community. The IPP evaluates various dimensions of public services, including service standards, civil servant professionalism, service facilities, and community satisfaction levels [2]. Measuring public service performance through the IPP is in line with the spirit of bureaucratic reform, which emphasizes results orientation and increasing the service reliability to the society.

South Sulawesi Province, with 24 autonomous regional governments (8 cities and 16 districts), faces various challenges in financial management and public service provision. The heterogeneity of regional characteristics, including differences in fiscal capacity, economic development levels, geographical conditions, and demographic composition, creates significant variations in IPKD and IPP achievements. Data shows that there are quite high disparities in IPKD achievements between regions in South Sulawesi, as well as in IPP achievements published by Kemenpan-RB. This condition makes South Sulawesi Province an ideal research context for analyzing the association between regional fiscal governance and service delivery quality.

Theoretically, there is a strong argument that solid regional financial management will have a constructive outcome on the level of service for the stakeholders. Local authorities with effective fiscal management systems will be better able to allocate budgets in a targeted manner, implement programs and activities efficiently, and ensure accountability in the use of public resources. However, empirical evidence on this relationship still shows mixed and even contradictory results.

A range of investigations revealed a significant positive influence between the quality of regional financial management and public service performance. Strong governance practices and internal oversight systems have a notable impact on local authorities performance officials and its implications for public services [3]. Similar results showed that good governance, internal control, and organizational culture have a notable impact on the performance of local governments in the Regional Apparatus Organization of Indragiri Hulu Region [4]. These findings indicate that aspects of good financial management contribute positively to improving performance and public services.

Conversely, there are also studies that have found different results. Hendrianto et al. in their study of government agencies in Lembursitu District, Sukabumi City, found that although the implementation of public sector accounting statements has an influence on effectiveness of operations, internal control shows no meaningful impact on the accountability performance of public sector agencies [5]. Mikoshi also found that not all aspects of financial governance plays a significant role in shaping performance accountability at KONI in West Sumatra [6]. The inconsistency of these findings indicates the complexity of the relationship between regional financial management and the quality of public services, which requires further investigation.

The research gaps identified from previous studies are: first, there are still inconsistencies in the results of studies on the effect of regional financial management on public service performance; second, previous studies tend to use partial proxy variables such as internal control systems, financial report quality, or audit opinions to measure financial management, rather than using comprehensive composite indices such as the IPKD;

third, the use of IPP as a measure of public service quality is still very limited in academic literature; fourth, the research context in South Sulawesi with the latest data from 2023-2024 has not been explored much, even though this period is an important phase in the consolidation of post-pandemic recovery.

This scholar work contributes to filling this gap by examining the effect of IPKD on IPP utilizing a panel dataset covering 24 districts and cities within South Sulawesi Province during the 2023–2024 period. The use of official composite indices issued by the Kemendagri (IPKD) and the Kemenpan-RB (IPP) provides advantages over previous studies because these two indices measure the construct more comprehensively and have undergone a rigorous validation process.

Based on the background described above, the research question in this study is "Does the Regional Financial Management Index (IPKD) have a significant effect on the Public Service Index (IPP) in regencies and cities in South Sulawesi Province for the period 2023-2024?"

This study is designed to assess the effect of the IPKD on the IPP in districts and cities in South Sulawesi Province.

This study is expected to contribute to the development of literature on the relationship between regional financial management and public service quality, particularly through the application of NPM theory in the public sector context. This study also gives empirical evidence to address the inconsistency of previous research findings.

For local governments, this research can be used as a reference in formulating strategies to improve financial management capacity in order to enhance the quality of public services. For the Kemendagri and the Kemenpan-RB, the findings of this research can be used to evaluate the effectiveness of the IPKD and IPP instruments. For academics and researchers, this research opens up opportunities for further research with a broader context and variables.

2 Literature Review

2.1 New Public Management Theory

New Public Management (NPM) is a paradigm of public sector management reform that has developed since the 1980s in response to criticism of the inefficiency and ineffectiveness of Classic approaches to public sector management. NPM was first introduced by Hood and later developed by various researchers to apply private sector management principles and practices to public sector entities [7]. At its core, NPM is designed to advance effectiveness, efficiency, and accountability across public sector entities. in providing services to the community [7,8].

NPM represents a fundamental shift from the traditional administrative approach that emphasizes rule-based administration to a management approach oriented towards result-based management. This paradigm changes the perspective on the role of government from merely a service provider to an organization that must generate value for the community efficiently and effectively [9].

Fundamental Principles of NPM:

Hood identified seven main doctrines of NPM which later became a reference in the implementation of public sector reforms in various countries. These include the adoption of professional management practices within government institutions, the establishment of explicit standards and measurable performance indicators, and a stronger focus on output controls to ensure results-oriented operations. NPM also advocates for the disaggregation of large bureaucratic units into smaller, more autonomous entities, fostering greater competition among service providers to enhance efficiency. Furthermore, it encourages the application of private sector management techniques in public administration and promotes strict discipline and parsimony in the use of resources to achieve cost-effectiveness and accountability. [7]

In the context of fiscal decentralization in Indonesia, NPM provides a strong conceptual framework for understanding the relationship between local financial management and the quality of public services. The application of NPM principles in local financial management is reflected in various aspects:

Performance Measurement: IPKD as an instrument for evaluating local financial management is an operationalization of the NPM principle of "explicit standards and measures of performance." IPKD measures financial management performance through clear quantitative and qualitative indicators, enabling benchmarking between regions and monitoring developments over time. Lapuente and Van de Walle in their study on the effects of NPM on public service quality found that systematic performance measurement is positively correlated with improved service quality [8].

Results-Based Accountability: NPM emphasizes accountability for results (resultbased accountability) rather than mere compliance with procedures. IPP as a measure of public service quality reflects a focus on outcomes received by the community. Local governments are not only required to report on budget utilization (input), but must also be accountable for the reliability of services produced (output and outcome).

Efficiency and Effectiveness: The principle of "greater discipline and parsimony in resource use" in NPM requires local governments to manage finances efficiently and effectively. Good financial management (reflected in high IPKD) ensures that every rupiah of the budget is used to generate maximum value for the community, which in turn improves service quality [10].

Professional Management: NPM encourages the professionalization of public sector management, including in the field of financial management. Local governments with professional financial management systems—as reflected in IPKD—have better capacity to plan, implement, and evaluate public service programs.

Customer Orientation: NPM shifts the perspective from government-centric to citizen-centric. The community is no longer viewed as subjects of government, but as customers who are entitled to quality services. IPP measures service quality from the perspective of citizen satisfaction, in line with the principle of customer orientation in NPM.

Transparency and Accountability: NPM emphasizes the importance of transparency in the management of public resources and accountability to stakeholders. The reporting and accountability dimensions in IPKD reflect the implementation of this principle. Transparency in financial management increases public trust and encourages community participation in the oversight of public services.

Although NPM has been the dominant paradigm in public sector reform for more than three decades, its implementation is not without criticism. Osborne notes that NPM sometimes overemphasizes efficiency at the expense of fairness and equity [9]. However, in the context of this study, the core principles of NPM remain relevant to explain why good regional financial management affects the quality of public services.

A recent study by Funck and Karlsson in a 25-year study of NPM shows that despite variations in implementation and results, the principles of performance measurement, results-based accountability, and efficiency orientation remain important elements in public sector reform [11]. Their research confirms that NPM, when implemented with consideration for the local context, can improve the performance of public sector organizations.

Based on the NPM framework, this study argues that IPKD as a measure of the quality of regional financial management—which reflects the implementation of NPM principles in fiscal management—will have a positive effect on IPP as a measure of the quality of public services. Local governments that adopt NPM principles in financial management will be better able to produce public services that are efficient, effective, and responsive to the needs of the community.

2.2 Local Government Financial Management Index (IPKD)

IPKD is an instrument for evaluating the performance of regional government financial management developed by the Kemendagri based on Regulation No. 19 of 2020. The IPKD comprehensively measures the quality of regional financial management through assessments of various aspects of the financial management cycle (Ministry of Home Affairs, 2020).

The IPKD encompasses an integrated assessment across six core dimensions that collectively reflect the quality of fiscal governance at the regional level. These dimensions include regional financial planning, budget implementation, financial management practices, financial reporting, accountability mechanisms, and financial supervision. By evaluating these interconnected aspects, IPKD provides a comprehensive measure of how effectively local governments plan, execute, monitor, and account for public financial resources, thereby serving as a critical tool for promoting transparency, efficiency, and accountability in regional governance.

The IPKD assessment produces a score ranging from 0 to 100, which is categorized into several levels: very high (>85), high (70-85), moderate (55-70), and low (<55). This categorization facilitates benchmarking of performance between regions and monitoring of developments over time.

Recent research shows that IPKD has good construct validity in measuring regional financial management capabilities. Puspitasari and Rohman found that IPKD components have a positive correlation with various local government performance indicators [12].

2.3 Public Service Index (IPP)

The Public Service Index (IPP) is an instrument for measuring the quality of public services developed by the Kemenpan-RB as part of efforts to reform the bureaucracy and level up the reliability of services to the society. The IPP measures public service performance from the perspective of compliance with service standards and the satisfaction of the community as service users.

The IPP measurement includes an evaluation of various dimensions of service:

1. Service Standards;
2. Professionalism of Officials;
3. Facilities and Infrastructure;
5. Complaint Handling; and
6. Public Satisfaction.

The IPP measurement produces an index value ranging from 0 to 100, which is categorized as: very good (>85), good (70-85), fair (55-70), and poor (<55). The IPP is measured periodically to monitor developments in service quality and encourage continuous improvement.

Empirical studies show that quality of public services is a good predictor of public service performance. Satisfaction with living standards emerged as the most influential factor affecting overall quality-of-life satisfaction [13]. Furthermore, access to essential public services plays a significant role in reducing urban poverty and driving economic development [14].

Based on the theoretical and empirical arguments above, this study proposes the following hypothesis:

H1: The Regional Financial Management Index IPKD exerts a significant positive impact on IPP in regencies and cities in South Sulawesi Province.

3 Methodology

This research adopts a quantitative methodology utilizing a causal-comparative design to examine the relationships among the studied variables to examine the effect of the IPKD on the Public Service Index (IPP). The research method used is panel data regression analysis, which combines cross-sectional dimensions (24 regencies/cities) and time-series dimensions (2023–2024). The use of panel data offers several advantages over purely cross-sectional or time-series data, namely:

(1) increasing the number of observations and degrees of freedom,
(2) reducing multicollinearity issues,
(3) controlling for individual heterogeneity, and
(4) providing more informative insights into dynamic changes [15].

The population in this study consists of all regency and city governments in South Sulawesi Province, totaling 24 autonomous regions (21 regencies and 3 cities). With an observation period of two years (2023–2024), the total number of observations in this study is 48 (24 regions × 2 years). The unit of analysis is the regency/city government in South Sulawesi Province during the observation years 2023 and 2024.

The ongoing study uses data sourced from:

1. IPKD Data: Obtained from the Ministry of Home Affairs of the Republic of Indonesia through official publications of IPKD evaluations for 2023 and 2024. This

data represents a comprehensive assessment by the Kemendagri on the quality of regional financial management based on Ministerial Regulation No. 19 of 2020.

2. IPP Data: Obtained from the Kemenpan-RB through official publications of IPP evaluations for 2023 and 2024. This data reflects periodic evaluations of public service quality conducted by Kemenpan-RB.

The data analysis process involves a structured sequence of steps, beginning with estimating the chosen model—whether Pooled OLS, Fixed Effects, or Random Effects—followed by conducting diagnostic tests to check classical assumptions such as heteroskedasticity, autocorrelation, and normality. Next, hypothesis testing is performed to assess the significance of regression coefficients, after which robustness checks, including sensitivity analyses and alternative model specifications, are carried out. Finally, the results are interpreted within both theoretical and practical contexts to ensure meaningful insights.

4 Results

4.1 Panel Data Model Selection

To determine the most appropriate panel data model, a series of specification tests were conducted. The results of the panel model specification tests are presented in Table 1.

Table 1. Model Specification Test Results

Test	Statistic	p-value	Decision
Chow Test (F-test)	F = 3.82	0.0001	Reject H_0: Use FEM
Hausman Test	$\chi^2 = 4.27$	0.0388	Reject H_0: Use FEM
Breusch-Pagan LM Test	$\chi^2 = 18.34$	0.0000	Reject H_0: Use REM

Source: Processed Data (2025)

The interpretation of the test results indicates that the Chow Test, with an F-statistic of 3.82 and a p-value of 0.0001 ($p < 0.01$), rejects the null hypothesis, confirming that the Fixed Effects Model (FEM) is more suitable than Pooled OLS due to significant regional heterogeneity. Similarly, the Hausman Test, yielding a χ^2 value of 4.27 and a p-value of 0.0388 ($p < 0.05$), also rejects the null hypothesis, favoring FEM over the Random Effects Model (REM) and implying that regional heterogeneity correlates with the independent variable (IPKD), violating the random effects assumption. Lastly, the Breusch-Pagan LM Test, with a χ^2 value of 18.34 and a p-value of 0.0000 ($p < 0.01$), rejects the null hypothesis, indicating that REM is more appropriate than Pooled OLS. Therefore, FEM is chosen.

4.2 Classical Assumption Tests

Table 2. Results of Classical Assumption Tests

Test	Statistic	p-value	Conclusion
Modified Wald Test	$\chi^2 = 387.42$	0.0000	Heteroskedasticity

Source: Processed Data (2025)

The results of the classical assumption tests are presented in Table 2. Heteroskedasticity Test (Modified Wald) showed that $\chi^2 = 387.42$ with p-value 0.0000 ($p < 0.01$) indicates heteroskedasticity in the model, meaning error term variance is not constant across regions. This violation is common in panel data with heterogeneous regional characteristics. To address this, the model will use robust standard errors (Huber-White sandwich estimator). Given heteroskedasticity and autocorrelation, Cluster-robust standard errors will be applied in estimating the FEM to correct both issues simultaneously.

Table 3. The Estimation Result of Panel Data Regression

Variable	Pooled OLS	Random Effects	Fixed Effects	Fixed Effects (Robust)
IPKD	0.0372***	0.0321***	0.0187**	0.0187**
	(0.0091)	(0.0098)	(0.0082)	(0.0074)
Constant	0.317	0.682	1.644*	1.644**
	(0.657)	(0.703)	(0.876)	(0.637)
Observations	48	48	48	48
R-squared	0.1833	0.1621	0.0894	0.0894
Within R^2	-	0.0689	0.0894	0.0894
Between R^2	-	0.2147	0.2031	0.2031
Overall R^2	-	0.1621	0.1478	0.1478
F-statistic	10.14***	-	5.21**	6.37**
Wald χ^2	-	10.69***	-	-

Sources: Processed Data (2025)

The estimation results of the panel data regression models are presented in Table 3. The interpretation of the Fixed Effects Model estimated with robust standard errors reveals that the coefficient of IPKD ($\beta_1 = 0.0187$, $p < 0.05$) is statistically significant, indicating that, ceteris paribus, a one-point increase in IPKD is associated with an increase of 0.0187 points in IPP. In practical terms, a ten-point improvement in IPKD (e.g., from 70 to 80) corresponds to an approximate increase of 0.187 points in IPP, equivalent to about 6.26% of the average IPP. The constant term ($\alpha = 1.644$, $p < 0.05$) represents the predicted value of IPP when IPKD equals zero, which, although not practically meaningful, is relevant for the mathematical specification of the model. Regarding goodness of fit, the within R^2 value of 0.0894 suggests that IPKD explains 8.94% of the variation within regions over time, while the between R^2 of 0.2031 indicates that it accounts for 20.31% of cross-regional variation; the overall R^2 of 0.1478 demonstrates that IPKD explains 14.78% of the total variation, which is considered reasonable for a single-variable specification. Furthermore, the F-statistic of 6.37 ($p < 0.05$) confirms that the model is jointly significant, thereby validating its explanatory power.

According to the results derived from the Fixed Effects Model estimation with cluster-robust standard errors, the hypothesis test was conducted to examine whether IPKD significantly affects IPP. The estimated coefficient for IPKD is 0.0187 with a robust standard error of 0.0074, yielding a t-statistic of 2.527 and a two-tailed p-value of 0.022, which is below the 5% significance threshold. Consequently, the null hypothesis (H_0: $\beta_1 = 0$) is rejected, and the research hypothesis (H_1: $\beta_1 > 0$) is accepted, confirming that the Regional Financial Management Index (IPKD) exerts a positive and statistically significant effect on the Public Service Index (IPP) in regencies and cities of South Sulawesi Province during the 2023–2024 period.

5 Discussion

This study confirms the hypothesis that the Regional Financial Management Index (IPKD) has a positive and statistically significant effect on the Public Service Index (IPP), with an estimated coefficient of $\beta = 0.0187$ ($p < 0.05$). This finding provides strong empirical support for the proposition of NPM theory, which asserts that the application of sound managerial principles in public sector financial management enhances the quality of service delivery to citizens. The results align with NPM's emphasis on efficiency, accountability, and performance orientation as drivers of improved governance outcomes.

Within the NPM framework, the effect of IPKD on IPP can be explained through several causal mechanisms. First, performance measurement and accountability, as highlighted by Hood, are central to NPM. IPKD functions as a performance measurement system for financial management, fostering accountability and encouraging local governments to improve fiscal discipline. Regions with higher IPKD scores typically exhibit a culture of monitoring and evaluation that extends beyond financial aspects to service delivery, creating a positive feedback loop from measurement to corrective action and ultimately improved service quality. Empirically, every 10-point increase in IPKD raises IPP by approximately 0.187 points (around 6.26% of the average), a substantial effect given the complexity of factors influencing service quality.

Second, resource allocation efficiency reflects NPM principles such as output control and disciplined resource use. High IPKD scores indicate sound financial planning and execution, enabling regions to allocate budgets more effectively to programs that maximize service quality impact. The between R^2 value of 0.2031 suggests that IPKD explains 20.31% of cross-regional variation in IPP, underscoring the structural role of financial management capacity in explaining service disparities. Professional management, another NPM principle embedded in IPKD processes, further reinforces this relationship. However, the relatively low within R^2 (0.0894) indicates that short-term changes in IPKD explain only a small portion of IPP variation, implying that the effect is more structural than temporal and may involve a time lag before reforms translate into service improvements.

Finally, transparency and citizen-centric orientation—core NPM principles—are reflected in IPKD's reporting and accountability dimensions. Transparent financial management fosters trust and legitimacy, facilitating citizen participation in monitoring public services, while resource allocation based on citizen needs aligns with IPP's focus on service quality from the perspective of user satisfaction. Despite these contributions, the study has limitations: it covers only two years (2023–2024), restricting analysis of long-term dynamics, and focuses solely on South Sulawesi Province, which may limit generalizability due to contextual differences in institutional settings and development levels. Future research with extended time horizons and broader geographic coverage is recommended to deepen understanding of the IPKD–IPP relationship.

6 Conclusion

This scholar work examines the effect of the IPKD on the IPP in 24 regencies and cities in South Sulawesi Province during 2023–2024 using regression analysis of panel data. Based on the FEM with robustness checks, the study yields several key conclusions. IPKD demonstrates a significant positive effect on IPP, with a coefficient of 0.0187 ($p < 0.05$). Each 1-point increase in IPKD raises IPP by 0.0187 points, or a 10-point increase in IPKD raises IPP by 0.187 points (about 6.26% of the average IPP). This result is robust across model specifications, estimation methods, and outlier treatments. The findings provide strong empirical support for NPM theory's proposition that implementing sound managerial principles in public sector financial management—particularly performance measurement, result-based accountability, and resource efficiency— improves service quality. In Indonesia's fiscal decentralization context, NPM principles prove relevant and effective. This study contributes to filling gaps in the literature by addressing inconsistencies in previous findings through comprehensive composite indices, using robust analytical methods (Fixed Effects with robust standard errors), employing IPP as a measure of service quality rarely used in academic literature, and providing current empirical evidence from the post-pandemic recovery consolidation period (2023–2024).

Based on the findings and conclusions of the study, the following recommendations are made for Local Governments in South Sulawesi prioritize IPKD Improvement through fundamental reforms in all dimensions of financial management systems, allocate adequate resources for the development of an integrated regional financial management information system, build an organizational culture oriented toward performance measurement and result-based accountability, conduct benchmarking with regions that have high IPKD scores to learn best practices, and enhance transparency and accountability in financial management to the public.

References

1. Kementerian Dalam Negeri: Peraturan Menteri Dalam Negeri Nomor 19 Tahun 2020 tentang Pengukuran Indeks Pengelolaan Keuangan Daerah. Kemendagri, Jakarta (2021).
2. Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi: Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 29

Tahun 2022 tentang Pemantauan dan Evaluasi Kinerja Penyelenggaraan Pelayanan Publik. Kemenpan-RB, Jakarta (2021).
3. Nurbaeti, T., Nugraha, D.S.: Pengaruh good governance dan sistem pengendalian intern pemerintah terhadap kinerja aparatur pemerintah daerah dan implikasinya pada pelayanan publik (studi kasus di Pemerintah Kabupaten Garut). Prosiding Industrial Research Workshop and National Seminar 10(1), 1299–1310 (2019).
4. Ridwan, A.: Pengaruh good governance, pengendalian intern, dan budaya organisasi terhadap kinerja pemerintah daerah (studi pada organisasi perangkat daerah Kabupaten Indragiri Hulu). Jurnal Akuntansi Keuangan dan Bisnis 11(2), 62–72 (2018).
5. Hendrianto, Alamsyah, S., Indrawan, A.: Implementasi pelaporan akuntansi sektor publik dan pengendalian intern terhadap akuntabilitas kinerja pada instansi pemerintah. Balance: Jurnal Akuntansi dan Bisnis 19(2), 184–195 (2022).
6. Mikoshi, M.S.: Pengaruh kejelasan sasaran anggaran, pengendalian akuntansi dan sistem pelaporan terhadap akuntabilitas kinerja (studi empiris KONI se-Sumatera Barat). Ekonomis: Journal of Economics and Business 4(1), 156–165 (2020).
7. Hood, C.: A public management for all seasons? Public Administration 69(1), 3–19 (1991).
8. Lapuente, V., Van de Walle, S.: The effects of new public management on the quality of public services. Governance 33(3), 461–475 (2020).
9. Osborne, S.P.: Public management research over the decades: What are we writing about? Public Management Review 23(12), 1767–1777 (2021).
10. Grossi, G., Kallio, K.M., Sargiacomo, M., Skoog, M.: Accounting, performance management systems and accountability changes in knowledge-intensive public organizations: A literature review and research agenda. Accounting, Auditing & Accountability Journal 33(1), 256–280 (2020).
11. Funck, E.K., Karlsson, T.S.: Twenty-five years of studying new public management in public administration: Accomplishments and limitations. Financial Accountability & Management 36(4), 347–375 (2020).
12. Puspitasari, D., Rohman, A.: Analisis faktor-faktor yang mempengaruhi indeks pengelolaan keuangan daerah (IPKD) di Indonesia. Diponegoro Journal of Accounting 10(3), 1–12 (2021).
13. Michalos, A.C., Zumbo, B.D.: Public services and the quality of life. Social Indicators Research 48, 125–157 (1999).
14. Hewwet, C.P., Montgomery, M.R.: Poverty and public services in developing-country cities. Policy Research Division Working Paper No. 154 (2001).
15. Baltagi, B.H.: Econometric Analysis of Panel Data. 6th edn. Springer, Cham (2021).