



Prosperia: Journal of Economic Development, Accounting, and Global Markets

Vol 1 No 2 May 2026, Hal 01-11

ISSN: 3125-117x (Print) ISSN: 3125-1181 (Electronic)

Open Access: <https://sovereignresearch.org/prosperia>

Analysis of The Application of Income Tax Calculations Under Section 21 Using The Average Effective Rate Approach (A Case Study of the Kendari City Regional Inspectorate)

Siti Nurhaliza^{1*}, Andi Basru Wawo², Safaruddin³

¹⁻³ Halu Oleo of University, Indonesia

email: Nurhaliza.siti@gmail.com¹

Article Info :

Received:
10-04-2026
Revised:
20-04-2026
Accepted:
02-05-2026

Abstract

This study examines the implementation of Article 21 Income Tax calculations using the Average Effective Rate approach at the Kendari City Regional Inspectorate. The research employed a descriptive quantitative design and used a census sampling technique involving all 73 civil servants within the institution. Data were collected from payroll records, income reports, tax withholding documents, and structured interviews with personnel responsible for payroll administration. The analysis focused on evaluating the conformity of tax calculations with prevailing regulations, assessing the distribution of tax liabilities across employee categories, and examining the administrative implications of the Average Effective Rate system. The findings indicate that the calculation procedures were implemented in accordance with applicable tax provisions and generated consistent withholding outcomes. The results also show that the approach accommodates variations in employee income characteristics while maintaining proportional tax treatment. From an administrative perspective, the system simplified payroll processing procedures, reduced operational complexity, minimized correction requirements, and strengthened transparency and accountability in tax administration. The study concludes that the Average Effective Rate approach supports regulatory compliance, administrative efficiency, and the modernization of public sector financial governance.

Keywords : Article 21 Income Tax, Average Effective Rate, Tax Administration Efficiency, Public Financial Governance, Payroll Management.



©2022 Authors.. This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.
(<https://creativecommons.org/licenses/by-nc/4.0/>)

INTRODUCTION

The growing complexity of contemporary fiscal systems has encouraged governments across the world to pursue administrative reforms aimed at improving tax compliance, enhancing legal certainty, and reducing the operational burden associated with tax collection and withholding procedures. Within this broader context, the modernization of personal income taxation has emerged as a central policy concern because income taxes constitute a major source of public revenue and play a critical role in financing economic development, social welfare programs, and public service delivery. In developing economies, the effectiveness of tax administration is increasingly linked to broader governance objectives that emphasize accountability, transparency, and efficient resource allocation. Indonesia has embraced this global trend through a series of fiscal reforms designed to strengthen state revenue capacity and support long term development priorities outlined in the national development framework (Bappenas, 2023). The strategic importance of tax revenue is evident in its dominant contribution to national income, making the accuracy and efficiency of tax administration an essential component of public financial management and sustainable fiscal governance (Direktorat Jenderal Pajak, 2024). These developments have intensified scholarly and policy interest in evaluating innovative mechanisms for income tax withholding, particularly the implementation of the Average Effective Rate approach in the calculation of Article 21 Income Tax.

Previous studies have consistently highlighted the importance of simplifying tax administration as a means of increasing compliance and reducing the administrative costs associated with tax obligations. Research examining taxation practices has demonstrated that excessive complexity in tax regulations often creates opportunities for inefficiency and strategic tax avoidance, thereby weakening the effectiveness of fiscal policy objectives (Sumantri et al., 2022). From a legal perspective, a well functioning tax system must balance administrative simplicity with legal certainty and distributive

fairness in order to maintain taxpayer confidence and institutional legitimacy (Sutedi, 2011). Recent evidence concerning the Average Effective Rate approach suggests that the policy has successfully simplified the calculation and withholding of Article 21 Income Tax by replacing more complicated procedures with a standardized rate structure that is easier for employers and tax administrators to apply (Wasesa et al., 2024). Empirical findings further indicate that the implementation of the new regulatory framework has reduced computational complexity and facilitated compliance among individual taxpayers, particularly in contexts where payroll administration involves a large number of employees with diverse income profiles (Yusnia & Fahriani, 2026). A critical synthesis of these studies reveals a common conclusion that administrative simplification can enhance procedural efficiency, although the broader implications for tax equity and practical implementation remain insufficiently explored.

Despite these contributions, the existing literature exhibits several conceptual and empirical limitations that constrain a comprehensive understanding of the Average Effective Rate approach. Most studies focus primarily on regulatory interpretation or theoretical simulations rather than examining how the policy operates in actual organizational settings where withholding decisions are made and implemented on a daily basis. Existing research tends to evaluate simplification outcomes from an administrative perspective while paying limited attention to the distributional consequences that may arise when taxpayers with relatively similar gross incomes are assigned different effective rates because of classification thresholds. Such conditions raise important questions regarding the compatibility of the Average Effective Rate mechanism with the principle of ability to pay that underlies modern taxation theory and serves as a normative foundation for equitable tax systems. The literature also reveals a lack of evidence from public sector institutions, particularly regional government agencies, where payroll structures and employee characteristics differ from those commonly examined in private sector oriented studies (Wasesa et al., 2024; Yusnia & Fahriani, 2026). As a result, important questions concerning the consistency, fairness, and accuracy of implementation remain unresolved.

The persistence of these gaps generates both scientific and practical concerns that warrant further investigation. From a scientific standpoint, policy effectiveness cannot be adequately assessed solely through regulatory design because outcomes often depend on the interaction between formal rules and their implementation within specific institutional environments. The distinction between theoretical policy expectations and practical implementation outcomes has been widely recognized as a critical issue in policy evaluation research, where discrepancies frequently emerge between intended objectives and actual results (Wouterse et al., 2023). From a practical perspective, regional government institutions are responsible for ensuring that tax withholding procedures comply with prevailing regulations while simultaneously maintaining administrative efficiency and accountability in the management of public funds. These responsibilities are closely linked to broader principles of public financial governance as mandated by the legal framework governing state finances in Indonesia (Republik Indonesia, 2003). Inaccurate implementation of tax withholding mechanisms may create administrative risks, reduce taxpayer confidence, and undermine the legal certainty that constitutes a fundamental requirement of an effective taxation system (Sutedi, 2011).

Within this scholarly landscape, the present study occupies a distinct position by focusing on the implementation of Article 21 Income Tax calculations using the Average Effective Rate approach within the Kendari City Regional Inspectorate. Unlike previous studies that primarily emphasize normative analysis or policy simulation, this research investigates the extent to which actual tax calculations conform to the provisions established under the current regulatory framework and examines the practical implications of the policy for employees with different levels of gross income and non taxable income status. The selection of the Regional Inspectorate as the research setting is particularly relevant because the institution plays a strategic role in supporting accountability and oversight within local government administration, making the quality of its tax withholding practices an important indicator of public sector fiscal governance. Through an examination of all civil servants within the institution, this study seeks to generate empirical evidence regarding the operational performance of the Average Effective Rate approach and its capacity to deliver both administrative efficiency and consistency in tax calculation practices.

This study aims to analyze the implementation of Article 21 Income Tax calculations using the Average Effective Rate approach among employees of the Kendari City Regional Inspectorate. By employing a quantitative descriptive design based on the recalculation of tax liabilities for the entire population of employees, the study provides a detailed assessment of compliance with prevailing tax

regulations and the practical effectiveness of the new calculation mechanism. The research contributes theoretically by enriching discussions concerning the relationship between tax simplification, administrative efficiency, legal certainty, and tax fairness within public sector organizations. It also contributes methodologically by offering evidence derived from a census based evaluation of tax withholding practices in a regional government institution, thereby providing a more comprehensive understanding of how the Average Effective Rate approach functions in real administrative settings and informing future policy development in the field of taxation and public financial management.

RESEARCH METHODS

This study employed an empirical quantitative research design using a descriptive approach to evaluate the implementation of Article 21 Income Tax calculations under the Average Effective Rate approach within the Kendari City Regional Inspectorate. The research population consisted of all civil servants working in the institution during the 2025 fiscal year, totaling 73 employees. Given the relatively small population size and the objective of obtaining a comprehensive assessment of tax calculation practices, a census technique was adopted in which all members of the population were included as research participants. The study relied primarily on secondary data obtained from official payroll records, salary reports, income statements, and tax withholding documents maintained by the Planning and Finance Subdivision. These documentary data were complemented by structured interviews with the expenditure treasurer and administrative personnel responsible for payroll and tax administration in order to verify procedural implementation and regulatory compliance. The operationalization of variables focused on gross employment income, non taxable income status, applicable Average Effective Rate classification, withholding rate category, and annual Article 21 Income Tax liability. The central analytical construct was the conformity of tax calculations with the provisions stipulated in the prevailing Indonesian tax regulations governing the implementation of the Average Effective Rate system, particularly those related to employee income taxation and withholding procedures (Direktorat Jenderal Pajak, 2016).

Data measurement was conducted through a systematic recalculation of Article 21 Income Tax liabilities for each employee based on reported gross income and non taxable income status using the Average Effective Rate framework prescribed by current tax regulations. The analysis employed descriptive statistical techniques including frequency distributions, comparative calculations, percentage analysis, and consistency assessments between institutional tax calculations and researcher generated calculations. The analytical procedure involved identifying income components, classifying employees according to the relevant Average Effective Rate category, determining the applicable withholding rate, and comparing the resulting tax liability with the amount withheld by the institution. Because the study was designed as a descriptive compliance assessment rather than an explanatory causal model, advanced econometric estimation was not required. Nevertheless, data validation procedures were undertaken through document triangulation and cross verification with interview evidence to ensure measurement accuracy and internal consistency. This analytical framework enabled a rigorous evaluation of whether the implementation of the Average Effective Rate approach supported administrative efficiency, regulatory compliance, and accountability in public sector financial management, which are fundamental principles underlying state financial governance and taxation administration in Indonesia (Republik Indonesia, 2003; Halim & Kusufi, 2014, Bastari et al., 2023; Direktorat Jenderal Pajak, 2024).

RESULTS AND DISCUSSION

Compliance of Average Effective Rate Implementation with Article 21 Income Tax Regulations

The empirical assessment began with an examination of whether the Article 21 Income Tax calculations applied by the Kendari City Regional Inspectorate were consistent with the regulatory framework governing the Average Effective Rate approach. Data obtained from payroll records and tax withholding documents indicated that tax calculations were conducted using classifications based on gross income and non taxable income status. This administrative structure reflects the broader objective of tax simplification introduced within Indonesia's fiscal reform agenda. Such an orientation is consistent with the principles of legal certainty and administrative efficiency emphasized in taxation governance literature (Bastari et al., 2023).

The recalculation process performed by the researchers demonstrated that the institution systematically applied the prescribed Average Effective Rate categories to employee income profiles. Employees with similar income characteristics were assigned to the corresponding rate groups according to prevailing tax provisions. Interview results with finance personnel also confirmed that tax calculations followed formal administrative guidelines. The observed pattern indicates a strong level of procedural conformity with tax administration standards established by the Directorate General of Taxes (Direktorat Jenderal Pajak, 2016).

An important observation emerging from the data concerns the role of non taxable income status in determining the applicable effective rate category. Employees classified under different family dependency statuses were assigned different Average Effective Rate categories despite having relatively close gross income levels. This outcome demonstrates that tax liability under the Average Effective Rate system is not determined exclusively by income magnitude. Similar findings have been reported in studies examining the implementation of the new withholding framework among permanent employees (Aryani & Romanda, 2024).

The conformity assessment also revealed that institutional tax calculations generated outcomes identical to those obtained through independent recalculation by the researchers. No discrepancies were identified regarding rate selection, category assignment, or annual tax liability amounts. Such consistency suggests that the payroll administration process has effectively internalized the operational requirements of the Average Effective Rate system. Comparable evidence was documented by Christie et al. (2025), who observed high procedural consistency in organizations implementing the same taxation scheme.

To provide a clearer overview of the implementation outcomes, the distribution of employee classifications and withholding rates is presented below.

Table 1. Distribution of Average Effective Rate Classifications Among Sample Employees

PTKP Status	TER Category	Average Rate (%)	Number of Employees
TK 0	TER A	1.25	12
TK 1	TER A	1.25	9
K 0	TER A	1.50	18
K 1	TER B	1.00	17
K 2	TER B	0.75 to 1.00	17
Total			73

Source: Processed payroll and tax withholding data from Kendari City Regional Inspectorate, 2025.

The distribution presented in Table 1 demonstrates that employee classification was concentrated within TER A and TER B categories according to income and dependency characteristics. The largest proportion of employees was recorded under the K 0 category, indicating the importance of family status in the application of withholding rules. The table also illustrates that effective tax rates remained within a relatively narrow range despite variations in gross income levels. Such a pattern supports the argument that simplification mechanisms can improve administrative consistency without requiring complex progressive calculations at the monthly level (Wasesa et al., 2024).

The consistency reflected in the table carries important implications for public sector financial management. Accurate withholding practices contribute to accountability in payroll administration and reduce the likelihood of compliance errors. Public organizations are increasingly expected to demonstrate transparent fiscal management because taxation forms a critical component of state revenue generation (Republik Indonesia, 2003). Effective implementation at the organizational level therefore strengthens confidence in broader fiscal governance structures (Mahmudi, 2019).

From a theoretical perspective, the findings align with the principles of taxation theory that emphasize the legitimacy of tax collection through predictable and understandable procedures. Taxpayers are more likely to perceive withholding mechanisms as fair when calculation procedures are transparent and consistently applied. This interpretation resonates with the legal framework of taxation which prioritizes certainty and clarity in tax obligations (Sutedi, 2011). Administrative simplicity can consequently function as a mechanism that strengthens voluntary compliance behavior.

The results also correspond with recent evidence indicating that Average Effective Rate implementation reduces the probability of calculation errors during payroll administration. Studies conducted in both private and public organizations reported that simplified rate structures decrease administrative complexity while maintaining compliance with tax regulations (Roziq & Harjo, 2025). Similar observations have been documented regarding the relationship between tax rate adjustments and withholding accuracy (Arifin et al., 2025). The evidence obtained from the Kendari City Regional Inspectorate reinforces these conclusions within a governmental institutional context.

Another notable implication concerns the relationship between tax administration modernization and organizational efficiency. Contemporary tax systems increasingly integrate simplification measures as part of broader digital and administrative transformation strategies aimed at improving compliance outcomes (Hesami et al., 2024). The ability of the institution to implement the Average Effective Rate framework without observable calculation discrepancies indicates a high degree of administrative readiness. Such readiness is particularly important because tax revenue remains a fundamental source of public financing for national development objectives (Direktorat Jenderal Pajak, 2024; Bappenas, 2023).

The overall evidence suggests that the implementation of Article 21 Income Tax calculations within the Kendari City Regional Inspectorate exhibits a strong level of conformity with the regulatory provisions governing the Average Effective Rate system. Consistent classification practices, accurate rate selection, and identical recalculation results collectively indicate robust procedural compliance. These outcomes support the view that tax simplification can enhance administrative effectiveness while preserving regulatory accuracy. The findings also provide empirical support for the argument that well designed withholding mechanisms contribute to stronger public financial governance and more efficient tax administration (Halim & Kusufi, 2014; Mardiasmo, 2023).

Distributional Implications of the Average Effective Rate Across Employee Income and Non Taxable Income Categories

The distribution of Article 21 Income Tax liabilities under the Average Effective Rate framework reveals notable differences across employee groups despite relatively comparable levels of gross income. The empirical evidence indicates that tax burdens are not determined solely by income levels but are also influenced by non taxable income status and the applicable Average Effective Rate category. Such variation is an important issue within public finance because tax systems are expected to balance administrative simplicity with distributive fairness. Previous studies have reported that the implementation of the Average Effective Rate approach may generate different tax outcomes among employees with similar earnings profiles, particularly when family related tax relief provisions are incorporated into the calculation mechanism (Aryani & Romanda, 2024; Novitasari & Anggraini, 2025).

The observed differences become more apparent when tax liabilities are grouped according to non taxable income status and Average Effective Rate classifications. Employees classified under categories with greater family allowances generally experience lower effective tax burdens than employees with similar gross income levels but fewer tax relief entitlements. This pattern reflects the redistributive function embedded within the Indonesian income tax system and provides an empirical basis for evaluating horizontal and vertical equity principles. The distribution of tax liabilities across employee categories is presented in Table 3.

Table 2. Distribution of Tax Liabilities Across PTKP Status and Average Effective Rate Categories

Name	PTKP Status	Average Gross Income (Rp)	TER Category	Average TER (%)	Average Annual Tax Liability (Rp)
Responden 1	Tk-0	Rp 87,109,656	TER A	1.25%	Rp 1,088,871
Responden 2	K-0	Rp 94,339,320	TER A	1.50%	Rp 1,415,090

Responden 3	Tk-1	Rp 88,578,144	TER A	1.25%	Rp 1,107,227
Responden 4	K-1	Rp 93,754,272	TER B	1.00%	Rp 937,543
Responden 5	K-0	Rp 93,177,396	TER A	1.50%	Rp 1,397,661
Responden 6	K-0	Rp 83,121,264	TER A	1.25%	Rp 1,039,016
Responden 7	K-1	Rp 92,607,528	TER B	1.00%	Rp 926,075
Responden 8	K-2	Rp 90,235,776	TER B	1.00%	Rp 902,358
Responden 9	K-2	Rp 87,836,556	TER B	1.00%	Rp 878,366
Responden 10	K-2	Rp 83,681,988	TER B	0.75%	Rp 627,615

Source: Processed payroll data of Kendari City Regional Inspectorate (2025).

The results indicate that employees classified under K1 and K2 categories tend to face lower average tax liabilities than employees within TK0, TK1, and K0 categories, even when gross income differences are relatively small. This outcome reflects the role of family related tax relief in determining taxable capacity and aligns with the Ability to Pay Theory, which argues that tax obligations should correspond to an individual's economic capability rather than nominal income alone (Mardiasmo, 2023). From a distributive perspective, employees with greater household responsibilities retain a larger proportion of disposable income after taxation. Similar findings were documented by Pelawi and Wijayanti (2025), who observed that Average Effective Rate implementation creates differentiated tax outcomes across taxpayer classifications.

The relationship between non taxable income status and tax liability demonstrates that the Average Effective Rate framework incorporates social considerations into withholding calculations. Employees with comparable gross earnings may face different withholding rates because the tax system recognizes variations in household obligations through PTKP adjustments. Such differentiation supports the principle of vertical equity because taxpayers with differing economic capacities are not treated identically. Empirical evidence reported by Sumali and Lim (2024) similarly suggests that the Average Effective Rate structure strengthens the alignment between tax burdens and taxpayer characteristics.

A more nuanced finding emerges from the comparison of employees whose annual gross income levels are relatively close yet who face different tax liabilities. The variation is primarily attributable to the interaction between PTKP status and Average Effective Rate classifications rather than differences in earnings alone. This indicates that tax burden allocation under the current framework is multidimensional and extends beyond a simple proportional relationship between income and tax. Comparable observations were reported by Aryani and Romanda (2025), who found that tax liabilities may diverge among employees despite limited variation in gross income.

From the perspective of horizontal equity, the findings present both strengths and challenges. Employees with identical income levels and identical PTKP status generally experience similar tax treatment, indicating consistency within taxpayer groups. Nevertheless, employees with comparable earnings but different family statuses are subject to different withholding outcomes, which may be perceived as unequal when income alone is used as the benchmark for fairness. Tax scholars have long argued that horizontal equity depends not only on income similarity but also on whether relevant personal circumstances are incorporated into tax assessments (Bastari et al., 2023).

The findings provide stronger support for vertical equity because the Average Effective Rate framework differentiates tax burdens according to broader measures of economic capacity. Employees receiving greater tax relief through PTKP provisions face lower tax liabilities, thereby preserving consumption capacity and household welfare. This outcome is consistent with the theoretical expectation that taxation should account for differences in taxpayers' ability to contribute to public revenues. Similar conclusions were reached by Mada and Meidiani (2026), who reported that

employees generally perceive PTKP based differentiation as a fair component of the Average Effective Rate system.

The distributional consequences identified in this study also have implications for employee perceptions of tax fairness and institutional legitimacy. Research on taxation consistently demonstrates that perceived fairness contributes to higher acceptance of tax obligations and stronger compliance behavior (Sumantri et al., 2022). When employees recognize that tax liabilities reflect both income levels and family responsibilities, the withholding process is more likely to be viewed as equitable. Such perceptions are important in public sector institutions where accountability and trust constitute key components of financial governance.

Beyond administrative considerations, differentiated tax burdens may influence broader economic behavior. Studies examining taxation and economic decision making suggest that variations in effective tax rates can affect household financial planning, consumption patterns, and resource allocation decisions (Ahmad et al., 2023; Adedoyin et al., 2023). Although the present study does not directly examine behavioral responses, the observed distributional pattern indicates that the Average Effective Rate system may shape disposable income outcomes among employees. This aspect warrants further investigation through longitudinal and behavioral tax research designs.

The findings also reinforce recent evidence suggesting that Average Effective Rate implementation extends beyond administrative simplification and contributes to distributive objectives within income taxation. Wasesa et al. (2024) and Christie et al. (2025) argue that the Average Effective Rate mechanism can simultaneously support operational efficiency and differentiated tax treatment according to taxpayer characteristics. Similar observations were reported by Roziq and Harjo (2025), who highlighted the importance of balancing simplicity and fairness in tax withholding systems. The empirical evidence from the Kendari City Regional Inspectorate indicates that tax burden allocation under the Average Effective Rate framework reflects both administrative practicality and equity oriented considerations.

Overall, the distributional analysis demonstrates that differences in tax liabilities are influenced by the interaction between gross income, PTKP status, and Average Effective Rate classifications. The resulting pattern supports the Ability to Pay Theory by linking tax obligations to broader indicators of economic capacity rather than income alone. The findings suggest that the Average Effective Rate framework contributes to vertical equity while maintaining a reasonable degree of horizontal consistency within comparable taxpayer groups. Such characteristics strengthen the role of Article 21 Income Tax withholding as an instrument that supports both revenue collection and distributive fairness within the public sector context.

Administrative Efficiency and Governance Implications of the Average Effective Rate System in Public Sector Tax Management

The empirical evidence indicates that the implementation of the Average Effective Rate approach has altered administrative workflows within payroll and tax management activities at the Kendari City Regional Inspectorate. Interview findings from payroll administrators revealed that tax withholding procedures became more streamlined because tax calculations no longer required repetitive annualized adjustments for routine payroll processing. Administrative simplification is widely recognized as a key determinant of effective tax governance because it reduces transaction costs and enhances procedural consistency within public institutions (Wasesa et al., 2024). The observed changes suggest that the Average Effective Rate system contributes not only to taxation administration but also to broader institutional efficiency objectives.

The administrative benefits identified in this study were reflected in several operational indicators obtained from payroll records and structured interviews. Treasury personnel reported fewer procedural stages during monthly payroll execution and reduced time allocation for tax related verification activities. Similar outcomes were documented by Christie et al. (2025), who found that the Average Effective Rate framework supported a more practical and manageable withholding process within organizational settings. These findings indicate that procedural simplification has become an important characteristic of contemporary payroll administration.

Table 3. Comparison of Administrative Procedures Before and After the Application of the Average Effective Rate Approach

Administrative Aspect	Previous Method	TER Method	Observed Impact
Calculation Steps	Multiple annualized calculations	Direct rate application	Reduced
Payroll Processing Time	Longer processing cycle	Shorter processing cycle	Faster
Tax Verification Requirement	Frequent manual checking	Limited verification process	Lower
Error Correction Frequency	Recurrent adjustment procedures	Occasional correction procedures	Reduced
Administrative Complexity	High	Moderate	Improved

Source: Structured interviews and payroll administration records of the Kendari City Regional Inspectorate (2025).

The evidence presented in Table 4 demonstrates a measurable reduction in administrative burdens after the implementation of the Average Effective Rate system. Payroll officers consistently indicated that fewer calculation stages reduced operational pressure during monthly salary processing periods. Reduced procedural complexity is consistent with the tax simplification framework proposed by Wasesa et al. (2024), which emphasizes efficiency gains through streamlined withholding mechanisms. The findings suggest that administrative resources can be redirected toward monitoring and financial management functions rather than repetitive calculation activities.

From a governance perspective, simplified payroll taxation procedures strengthen organizational accountability. Public sector accountability requires government institutions to maintain reliable financial information and transparent administrative processes, particularly in areas involving public funds (Halim & Kusufi, 2014). When tax calculations become easier to administer, opportunities for procedural inconsistencies are reduced and documentation becomes easier to verify. This condition supports stronger internal control mechanisms within regional government financial management systems.

The findings also demonstrate a reduction in the frequency of correction procedures associated with payroll taxation activities. Administrative personnel explained that the standardized structure of the Average Effective Rate approach minimizes interpretation differences during routine payroll implementation. Similar observations were reported by Dariansyah and Rozali (2025), who identified fewer operational complications after the adoption of the Average Effective Rate framework in organizational tax administration. Reduced correction frequency contributes to greater administrative reliability and lower compliance costs at the institutional level.

Efficiency improvements identified in this study can also be interpreted through the lens of public sector financial management. Mahmudi (2019) argues that efficient financial administration supports better utilization of institutional resources and enhances organizational performance. The reduction in administrative workload observed in payroll operations indicates that staff capacity can be allocated to planning, monitoring, and evaluation activities rather than repetitive procedural tasks. Such outcomes are particularly important for government agencies operating under increasing demands for accountability and service quality.

The observed administrative changes are closely associated with broader tax modernization initiatives promoted by the Indonesian tax authority. The Directorate General of Taxes has emphasized administrative simplification and digital integration as central components of contemporary tax reform strategies (Direktorat Jenderal Pajak, 2024). The Average Effective Rate mechanism aligns with these objectives because it facilitates more predictable payroll processing and supports standardized withholding procedures. Roziq and Harjo (2025) similarly concluded that simplification mechanisms strengthen the effectiveness of tax administration within institutional environments.

The findings may also be interpreted within the broader literature on digital governance and administrative transformation. Hesami et al. (2024) emphasize that modern tax systems increasingly

depend on simplified procedures that can be integrated into digital platforms and automated administrative processes. A less complex withholding structure enhances compatibility with electronic payroll systems and reduces the need for manual intervention. This institutional adaptability is important for sustaining long term improvements in public sector governance capacity.

Cost effectiveness considerations further reinforce the significance of the findings. Wouterse et al. (2023) explain that administrative systems are considered effective when operational benefits exceed implementation burdens and resource requirements. The reduction in verification activities, correction procedures, and processing time observed in this study indicates that the Average Effective Rate approach generates operational efficiencies that extend beyond tax calculation outcomes. Comparable efficiency logic has been applied in other complex administrative systems where simplification reduces resource consumption while maintaining functional effectiveness (Cottier et al., 2024).

The governance implications of these findings extend beyond organizational efficiency and relate directly to principles of state financial management. Public institutions are expected to administer financial obligations through transparent, accountable, and efficient mechanisms as mandated within the national public finance framework (Republik Indonesia, 2003). Bastari et al. (2023) and Mardiasmo (2023) argue that effective tax administration strengthens public trust because it demonstrates institutional competence and procedural integrity. The evidence from the Kendari City Regional Inspectorate suggests that the Average Effective Rate approach supports these governance objectives through a more streamlined administrative structure.

The results also contribute to ongoing discussions regarding institutional capacity building within public organizations. Capacity enhancement is not solely determined by additional resources but also by the design of administrative systems that reduce complexity and improve operational performance. Studies by Arifin et al. (2025), Yusnia and Fahriani (2026), Sumali and Lim (2024), Aryani and Romanda (2024), Aryani and Romanda (2025), Novitasari and Anggraini (2025), Pelawi and Wijayanti (2025), and Mada and Meidiani (2026) collectively indicate that the Average Effective Rate framework has implications extending beyond tax liability calculations into broader administrative outcomes. The findings of the present study reinforce the view that simplification mechanisms can strengthen governance quality, institutional efficiency, and administrative sustainability within public sector tax management.

CONCLUSION

The findings demonstrate that the implementation of the Average Effective Rate approach for Article 21 Income Tax calculations at the Kendari City Regional Inspectorate has been carried out in accordance with prevailing tax regulations and has supported greater administrative effectiveness in payroll taxation management. The calculation mechanism produced consistent withholding outcomes and provided a clearer framework for monthly tax deductions, strengthening legal certainty and procedural compliance within public sector financial administration. The application of the approach also revealed differences in tax burdens among employees with varying income characteristics, indicating that the system accommodates differentiated tax treatment while maintaining the principles of proportionality and fairness embedded in the Indonesian income tax framework. From an institutional perspective, the Average Effective Rate approach contributed to the simplification of payroll procedures, reduced administrative complexity, minimized correction requirements, and enhanced transparency and accountability in tax withholding processes. These findings indicate that the approach functions not only as a tax calculation mechanism but also as an instrument supporting digital governance, operational efficiency, and the modernization of public financial management practices within regional government institutions.

REFERENCES

- Adedoyin, F. F., Seetaram, N., Disegna, M., & Filis, G. (2023). The effect of tourism taxation on international arrivals to a small tourism-dependent economy. *Journal of Travel Research*, 62(1), 135-153. <https://doi.org/10.1177/00472875211053658>
- Ahmad, N., Shah, F. N., Ijaz, F., & Ghouri, M. N. (2023). Corporate income tax, asset turnover and Tobin's Q as firm performance in Pakistan: Moderating role of liquidity ratio. *Cogent Business & Management*, 10(1), 2167287. <https://doi.org/10.1080/23311975.2023.2167287>

- Arifin, R., Syarifuddin, S., & Ilham, I. (2025). The Tax Rate Adjustments and Compliance Errors: The Effect of Average Effective Tax Rate Changes on Article 21 Income Tax Withholding. *Ampok Management Accounting Review (AMAR)*, 5(2), 1428-1437. <https://doi.org/10.37531/amar.v5i2.3436>
- Aryani, F., & Romanda, C. (2024). Dampak Penerapan Tarif Pajak Efektif Rata-Rata (Ter) Terhadap Perhitungan Pajak Penghasilan Pasal 21 Wajib Pajak Orang Pribadi Karyawan Tetap Pada Pt. Anugrah Sekayu. *Jurnal Ilmiah Akuntansi Rahmadiyah*, 7(2), 221-240. <https://doi.org/10.51877/jiar.v7i2.346>
- Aryani, F., & Romanda, C. (2025). Analisis Perhitungan Pajak Penghasilan Pasal 21 Pasca Penerapan Tarif Pajak Efektif Rata-Rata (Ter) Diakhir Tahun Bagi Wajib Pajak Orang Pribadi Karyawan Tetap Pada Pt. Anugrah Sekayu. *Jurnal Ilmiah Akuntansi Rahmadiyah*, 8(1), 37-56. <https://doi.org/10.51877/jiar.v8i1.392>
- Bappenas. (2023). *Peraturan Menteri Negara Perencanaan Pembangunan Nasional/Kepala Badan Perencanaan Pembangunan Nasional Nomor 5 Tahun 2023 tentang Tata Cara Penyusunan Rencana Pembangunan Jangka Menengah Nasional Tahun 2025-2029*. <https://peraturan.bpk.go.id/Details/260368/permen-ppnkepala-bappenas-no-5-tahun-2023>
- Baraké, M., Chouc, P. E., Neef, T., & Zucman, G. (2022). Revenue effects of the global minimum tax under pillar two. *Intertax*, 50(10). <https://doi.org/10.54648/taxi2022074>
- Bastari, R. G., Siahaan, A. L. S., Dewi, R. S., Amin, F., Susilowardani, Sukma, D. P., Dewi, P. M., Paramitha, A. A., Rahman, A., Kumala, R., Yudianto, D., Puspendari, Y., Solapari, N., Faried, F. S., Syamsih, D., & Tektona, R. I. (2023). *Hukum pajak di Indonesia* (A. Iftitah, Ed.). Sada Kurnia Pustaka.
- Christie, A. A. M., Hastuti, R., Chrismastuti, A. A., & Teresia, A. (2025). Study on the Implementation of the Average Effective Rate (TER) of Income Tax Article 21. *Festival Riset Akutansi (FRA) IV*, 1(1), 310-313. <https://doi.org/10.31942/fra4.v1i1.14775>
- Cottier, B., Rahman, R., Fattorini, L., Maslej, N., Besiroglu, T., & Owen, D. (2024). The rising costs of training frontier AI models. *arXiv preprint arXiv:2405.21015*. <https://doi.org/10.48550/arXiv.2405.21015>
- Dariansyah, D., & Rozali, M. (2025). Analysis of the Application of Income Tax Article 21 Calculation with an Average Effective Rate based on Government Regulation Number 58 of 2023 at PT XYZ. *International Journal of Humanity Advance, Business & Sciences (IJHABS)*, 3(1.1), 231-238. <https://doi.org/10.59971/ijhabs.v3i1.1.661>
- Direktorat Jenderal Pajak. (2016). *Peraturan Direktur Jenderal Pajak Nomor PER-16/PJ/2016 tentang Pedoman Teknis Tata Cara Pemotongan, Penyetoran, dan Pelaporan Pajak Penghasilan Pasal 21 dan/atau Pasal 26 Sehubungan dengan Pekerjaan, Jasa, dan Kegiatan Orang Pribadi*. Kementerian Keuangan RI. <https://www.pajak.go.id/id/peraturan-direktur-jenderal-pajak-nomor-16pj2016>
- Direktorat Jenderal Pajak. (2024). *Laporan kinerja DJP tahun 2024*. Kementerian Keuangan Republik Indonesia. <https://www.pajak.go.id/index.php/id/laporan-kinerja-djp-tahun-2024>
- Halim, A., & Kusufi, M. S. (2014). *Akuntansi sektor publik: Akuntansi keuangan daerah*. Salemba Empat.
- Hesami, S., Jenkins, H., & Jenkins, G. P. (2024). Digital transformation of tax administration and compliance: A systematic literature review on E-Invoicing and pre-filled returns. *Digital Government: Research and Practice*, 5(3), 1-20. <https://doi.org/10.1145/3643687>
- Iino, H., Hashiguchi, M., & Hori, S. (2022). Estimating the range of incremental cost-effectiveness thresholds for healthcare based on willingness to pay and GDP per capita: a systematic review. *PloS one*, 17(4), e0266934. <https://doi.org/10.1371/journal.pone.0266934>
- Mada, B. A., & Meidiani, W. (2026). Persepsi Karyawan Terhadap Perubahan Metode Perhitungan Pajak Penghasilan Pasal 21: Dengan Tarif Efektif Rata-Rata (TER) Studi Kasus Pada Kantor Hukum Irawan Soetanto dan Rekan. *Kreasi: Jurnal Inovasi dan Pengabdian kepada Masyarakat*, 6(1), 39-56. <https://doi.org/10.58218/kreasi.v6i1.2513>
- Mahmudi. (2019). *Manajemen keuangan daerah*. UPP STIM YKPN.
- Mardiasmo. (2023). *Perpajakan: Edisi terbaru*. Andi Offset.
- Novitasari, A. D., & Anggraini, D. I. (2025). Pengaruh Penerapan Tarif Pajak Efektif Rata-Rata (TER) Terhadap Perhitungan Pajak PPh 21 Wajib Pajak Orang Pribadi Karyawan Tetap pada CV

- ASM. PENG: *Jurnal Ekonomi Dan Manajemen*, 2(3), 3501-3512.
<https://doi.org/10.62710/80aw1k71>
- Pelawi, N. D. M., & Wijayanti, N. A. (2025). Analysis Impact Application of Average Effective Rate in Calculation of Income Tax Article 21 (Case Study of PT X). *Enrichment: Journal of Multidisciplinary Research and Development*, 2(11), 1305-1311.
<https://doi.org/10.55324/enrichment.v2i11.282>
- Republik Indonesia. (2003). *Undang-Undang Nomor 17 Tahun 2003 tentang Keuangan Negara*. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 47, Tambahan Lembaran Negara Republik Indonesia Nomor 4286.
- Roziq, F., & Harjo, D. (2025). Implementasi Kebijakan Pajak Penghasilan Pasal 21 Skema Perhitungan Tarif Efektif Rata-Rata Wajib Pajak Orang Pribadi. *Permana: Jurnal Perpajakan, Manajemen, dan Akuntansi*, 17(2), 416-426. <https://doi.org/10.24905/permana.v17i2.802>
- Sumali, C., & Lim, S. A. (2024). Analisis pajak penghasilan pasal 21 sebelum dan sesudah penerapan tarif efektif rata-rata. *BIP's Jurnal Bisnis Perspektif*, 16(2), 119-136.
<https://doi.org/10.37477/bip.v16i2.638>
- Sumantri, F. A., Kusnawan, A., & Anggraeni, R. D. (2022). The effect of capital intensity, sales growth, leverage on tax avoidance and profitability as moderators. *Primanomics: Jurnal Ekonomi & Bisnis*, 20(1), 36-53. <https://doi.org/10.31253/pe.v20i1.861>
- Sutedi, A. (2011). *Hukum pajak*. Sinar Grafika.
- Wasesa, T., Toni, S. H., Karnaen, B., Zuhroh, D., & Dewi, R. (2024). Simplification of Income Tax Withholding Article 21 Through the Application of Average Effective Rates for Individual Taxpayers. *International Journal of Accounting and Management Research*, 5(2), 89-97.
<https://doi.org/10.30741/ijamr.v5i2.1484>
- Wouterse, B., van Baal, P., Versteegh, M., & Brouwer, W. (2023). The value of health in a cost-effectiveness analysis: theory versus practice. *Pharmacoeconomics*, 41(6), 607.
<https://doi.org/10.1007/s40273-023-01265-8>
- Yusnia, V. I., & Fahriani, D. (2026). Implementasi Peraturan Pemerintah Nomor 58 Tahun 2023 terhadap Pajak Penghasilan Pasal 21 bagi Wajib Pajak Orang Pribadi. *Jurnal Mahasiswa Manajemen dan Akuntansi*, 5(1), 1184-1194. <https://doi.org/10.30640/jumma45.v5i1.6020>