DETERMINANT ANALYSIS OF LOCAL RETRIBUTION ON LOCAL REVENUE

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| ARTICLE INFO	ABSTRACT
Keywords: Regional Original Income; Building Permit Fees; Health Fees; Parking Fees; Motorized Vehicle Testing Fees; Regional Wealth Use Fees	Retribution functions as a natural source of income for the region, as a budget to finance all daily government needs, and also helps in regional development. If the budget is sufficient, all economic activities can run well. The purpose of this study was to determine the effect of building permit fees, cleaning fees, parking fees, motor vehicle inspection fees, and costs of using the regional property on the main regional income. The survey was conducted in 26 provinces/cities in Central Java during the 2019-2021 period. This survey method uses panel data regression and is estimated using Eviews 10. The study shows that the FEM estimate was chosen as the best estimate. Cleaning fees, building permit fees, and some parking fees have a positive impact on local revenues. On the other hand, from 2019 to 2021, in 26 regencies/cities in Central Java, BUMN PPh and PKB Tax have no impact on local revenue.
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1. INTRODUCTION

With the promulgation of Law No. 32 of 2004 on Territorial Administration, it is believed that the territorial administration will be able to regulate and supervise its governmental affairs by agreeing on the rules of independence and co-administration, to accelerate the realization of social welfare. The goals of implementing territorial independence are to expand territorial autonomy, promote candor and open responsibility for territorial financial administration, increase government responsiveness to open needs, increase open interest in territorial advancement, increase the productivity and viability of budgetary administration and open services, and empower democratization in the regions [1].

One of the sources of PAD is local retribution, and local governments are empowered to collect local retribution related to parts of people's lives to promote local revenue to fulfill local needs. Local retribution plays an important role in PAD. Managed well, local retribution will advance local revenue [2]. Local retribution is based on services/permits explicitly obtained by the local government to certain persons or institutions with the reference that they play a role in exploring local funding sources during development carried out by the local government. Payment against this background is expected to expand and equalize the economy and the welfare of the people in certain areas [3].

Covid-19 has forced all local governments in Indonesia to issue budget policies that affect their financial performance. One of the affected regions in Indonesia is the municipal and provincial regions in the Central Java region. As one of the states empowered to govern their regions to control their budgets and drive development. The district/city governments in Central Java and their communities are expected to work together while managing and maximizing the potential of economic resources to maximize local revenue.

Graph 1 shows the evolution of the PAD of 26 provinces/cities in Central Java from 2019 to 2021. Semarang City has the highest PAD for three consecutive years, the largest from 2021 at IDR 2.38594 trillion, IDR 2.6633 trillion in 2020, and IDR 2.2454 trillion in 2019. That's 10,000 rupiahs. Banyumas ranked second as the province with the highest PAD with IDR761.99 billion, followed by Cilacap with IDR686.81 billion. Pekalongan Regency recorded the lowest PAD Yuan realization in 2019 and 2020, at Rp212.78 billion and Rp229.87 billion respectively. Wonosobo Province ranked second as the province with the lowest realization at RMB 238.37 billion in 2019, followed by Banjar Negara Province in 2020 at Rp 238.64 billion.

Figure 1. Development of Regional Original Revenue of 26 Regency / City in Central Java Province for the 2019-2021 Period

Source: Central Bureau of Statistics 2019-2021
2019
2020
2021
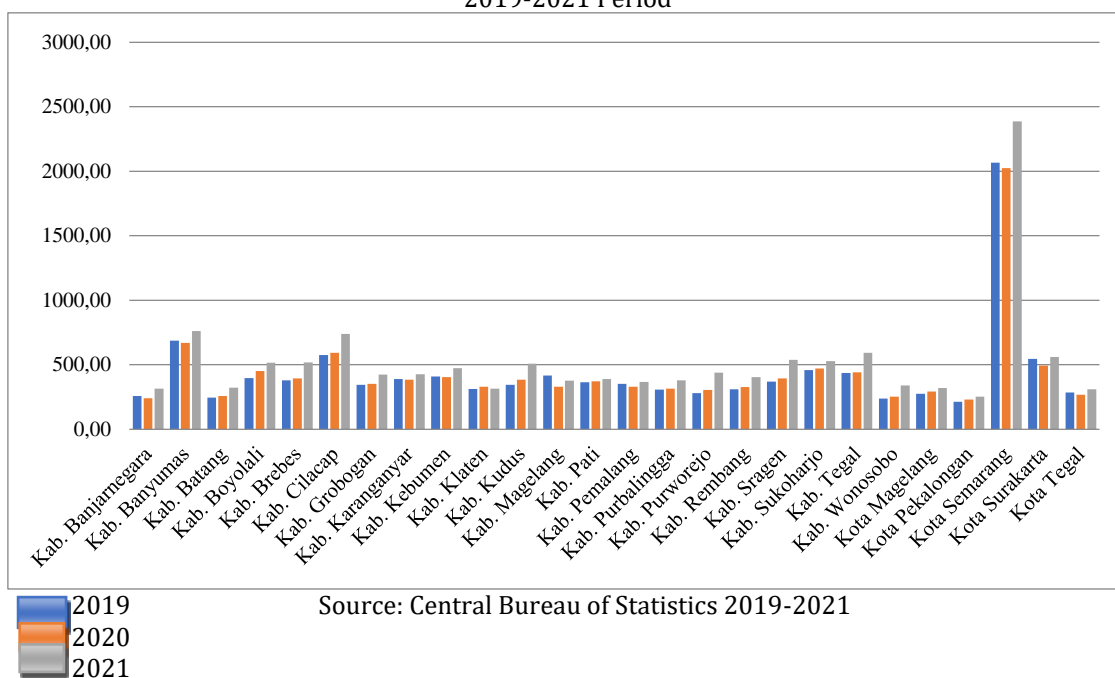
PAD accounted for 27.13% of Central Java's total turnover. As the Covid-19 pandemic continues, insights have increased compared to last year's period. This proves that economic activities are gaining momentum. Its largest PAD contribution in Central Java came from local taxes at IDR3.74 trillion or 62.01% of total PAD. In contrast, the contribution of regional retaliation was the smallest, only 4.59% or Rp227 billion (Central Java Province Economic Report, 2020).

Local tariffs have an important role in regional development because they can support the implementation of government policies for the benefit of the local community. One form of local tax revenue that can make significant participation in PAD is garbage/cleanliness retribution. According to [4], the more people who utilize waste and cleaning services, the greater the contribution to PAD. Districts/cities in Central Java also have great potential in the field of retaliation for testing electric vehicles as vehicle data continues to increase from year to year. Therefore, local governments should seize the opportunity to streamline and increase vehicle testing revenue at the District/City Transportation Office.

Retaliation against the use of local property should be taken seriously, especially considering the perfection of the local property use tax itself and the agency that collects it, or through its development, while taking into account the real situation in the region and can be further developed consistently. This is a method of observing and investigating the situation on the ground. Particular attention should be paid to how local property use fees are collected. This is where the key to the successful optimization of toll collection lies, and the municipal government should always coordinate with the collecting agency according to the local property toll formula. This means that it can be further optimized [5].

The development and growth of buildings have a considerable potential to obtain Building Construction Permit (IMB) Tax as stipulated in Perda No. 1 Th. 2015 on IMB Reimbursement. In addition, because IMF is directly related to community services, it can be said to be a policy that affects the progress of community development, so its implementation must be a priority. Looking at the reality of development progress in Provinces/Cities in Central Java, the IMF policy should also be implemented in municipalities, to optimize the management of regional potential so that it can bring economic benefits. In a sense, the IMF levy policy has far-reaching implications for the progress of regional development, particularly local own-source revenue (PAD), and its implementation needs to be further facilitated [6].

An alternative local tax that contributes and can increase local revenue is parking fees. Parking fees are for the use of parking spaces sponsored by the local government. The number of cars is increasing

year by year, and the revenue from this tax is also increasing. A significant increase in parking levy revenue will encourage the creation of self-sustaining local revenue [7].

The low effectiveness of district/city levies in Central Java is influenced by the non-optimal collection by the regional retribution post. From here we can see how much the contribution of the region regarding the source of local revenue and the contribution itself, but the goal is to find out how much the promotion of the contribution of the region as a source of PAD. Central Java Province / City is to increase local revenue, we have established regional revenue planning guidelines, and we continue to strive not to rely on or reduce central and regional revenue sources. local government. With this background, it is necessary to conduct a study to analyze the impact of building permit retribution, cleaning retribution, parking retribution, vehicle inspection retribution, and retribution for the use of local property in 26 districts on local revenue. Cities in Central Java in 2019-2021.

2. METHOD

To estimate the degree of elements affecting PAD in 26 districts/cities in Central Java for the period 2019-2021. The Panel Data Regression tool is used in the following econometric model:

$$PAD_{it} = \beta_0 + \beta_1 RIMB_{it} + \beta_2 RK_{it} + \beta_3 RP_{it} + \beta_4 RPKB_{it} + \beta_5 RPKD_{it} + \varepsilon_{it}$$

di mana:
PAD	= Regional Original Income (Miliar)
RIMB	= Retribution for Building Construction Permit (Rupiah)
RK	= Cleaning Levies (Rupiah)
RP	= Parking Retribution (Rupiah)
RPKB	= Motor Vehicle Testing Retribution (Rupiah)
RKPD	= Retribution for Use of Regional Assets (Rupiah)
β_0	= Constant
$\beta_1 \dots \beta_5$	= Regression Coefficient
i	= Observation i
t	= Year t

The econometric model above is a mutation of the Hayati (2016) model. Building permit fees, cleaning fees, parking fees, vehicle inspection fees, and local property utilization fees are expected to have a positive impact on PAD. The study data used are time series data from 2019-2021 and cross-section data in 26 districts/cities in Central Java Province obtained from BPS. The data used includes Regional Original Revenue (PAD), Building Permit Retribution (RIMB), Cleaning Retribution (RK), Parking Retribution (RP), Motor Vehicle Testing Retribution (RPKB) and Regional Property Usage Retribution (RPKD). The above econometric demonstration estimation setup will include estimation of information board display parameters using Pooled Least Squares (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM) approach; determination of the best estimation show with Chow test and Hausman test and if necessary Lagrange Multiplier test; testing the goodness of show on the selected estimation show; and testing the legitimacy of the impact on the selected estimator show.

3. RESULT AND DISCUSSION

The estimation results of Panel Data Regression with Pooled Least Squares (PLS) approach, Fixed Effect Model (FEM), and Random Effect Model (REM) can be seen in Table 1.
Estimated Model Selection Test

The Chow and Hausman tests are used to determine the leading estimation demonstrations PLS, FEM, or REM. If the Chow test finds that PLS is selected and the Hausman test selects REM, then an additional test, the Lagrangian Multipliers (LM) test, is performed for you to choose which choice is best for you. The estimation shows between PLS and REM.
 Chow test

The Chow test is used to determine which demonstration is considered PLS or FEM. H0 of the Chow test: the evaluated demonstration is PLS, and HA: the evaluated show is FEM. H0 is recognized in case the p-value, likelihood, or factual experimental centrality of F > α; H0 is rejected in case the p-value, likelihood, or factual experimental centrality of F < α. The results of the Chow test can be seen in Table 1. From Table 1, it can be seen that the p-value, likelihood, or factual significant observation of F is 0.0000 (<0.01), so H0 is rejected. In conclusion, the evaluated event is FEM.

Table 1. Estimation Results of Panel Data Regression Econometric Model - Cross section

Variable	Regression Coefficient		
	PLS	FEM	REM
C	147,4028	329,1275	176,0452
RIMB	1,45E-09	1,10E-08	4,48E-10
RK	1,57E-08	7,94E-08	3,58E-08
RP	-4,49E-08	9,54E-08	3,70E-09
RPKB	3,19E-07	-1,26E-07	2,25E-09
RPKD	-3,01E-09	4,08E-09	-4,15E-09
R^2	0,919160	0,989513	0,776413
Adjusted. R^2	0,913546	0,982819	0,760887
F statistic	163,7304	143,8247	50,00456
Prob. F statistic	0,000000	0,000000	0,000000

Model Selection Test

(1) Chow

Cross- Section F(25,47) = 12,612100; Prob. F(25,47) = 0,0000

(2) Hausman

Cross-Section random χ^2 (5) = 33,062313; Prob. χ^2 = 0,000

Source: BPS, processed

Hausman Test

The Hausman test is used to select the evaluated display FEM or REM. Hausman tests H0: the evaluated demonstration is REM and HA: the evaluated demonstration is FEM. H0 is recognized if the p-value, likelihood, or factual experimental centrality is $\chi^2 > \alpha$; and H0 is rejected if the p-value, likelihood, or measured experimental importance is $\chi^2 < \alpha$. The results of the Hausman test can be seen in Table 1. From Table 1, it can be seen that the p-value, likelihood, or feasibility of the measured observation of χ^2 is 0.0000 (<0.01), so H0 is recognized. In conclusion, the demonstration assessed is FEM. From the previous Chow Test and Hausman Test, the FEM event was selected as the best-valued event. The resulting total estimates of the FEM demonstration can be seen in Table 2.

Table 2. Model Estimation of Fixed Effect Model

$$\widehat{PAD}_{it} = 329,1275 + 1,10\text{E} - 08\ RIMB_{it} + 7,94\text{E} - 08\ RK_{it}$$
$$(0,0069)^* \qquad (0,0166)^{**}$$
$$+ 9,54\text{E} - 08\ RP_{it} - 1,26\text{E} - 07\ RPKB_{it} + 4,08\text{E} - 09\ RPKD_{it}$$
$$(0,0093)^* \qquad (0,2081) \qquad (0,3509)$$

R^2 = 0,989513; DW = 2,480224; $F.$ = 147,8247; Prob. F = 0,000000

Source: Annex 1: *Significant at $\alpha = 0,01$; ****** Significant at $\alpha = 0,05$; ******* Significant at $\alpha = 0,10$.

Existence Test of FEM Estimated Model

Demonstration exists when at least one autonomous variable affects a subordinate variable (not all relapse coefficients are zero). The demonstrated presence test is an F test. Because in the REM (Irregular Impact Show) event that is considered the best there are 5 autonomous factors, the definition of the theory is:H0: 〖β〗_1=β_2=β_3=β_4=β_5=0 (the recurrence coefficients of the four factors are zero or show no); HA:β_1≠0∨β_2≠0∨β_3≠0 ∨β_4≠0 ∨β_5≠0 (at least one relapse coefficient does not break even with zero or a demonstration exists). H0 is expressed in terms of the p-value, likelihood, or factual observational noteworthiness of F > α; H0 will be rejected if the p-value, likelihood, or factual observational noteworthiness of F < α. From Table 2, it can be seen that if the p-value (p esteem), likelihood, or factual experimental noteworthiness of F is 0.00000 (<0.01); then H0 is rejected. In conclusion, the event evaluated by FEM exists.

Interpretation of the Coefficient of Determination (R2)

The coefficient of determination (R^2) shows that the value of R2 in FEM is 0.989513, meaning that 99% of the variation in the variable of local revenue is explained by the variable of building construction permit. Motor Vehicle Levies, Cleaning Levies, Parking Levies, Vehicle Testing Levies, Public Goods Usage Levies. The remaining 0.01% is influenced by other factors that are not included in the model.

Validity Test of the Influence of Independent Variables of the Estimated FEM Model

The impact legitimacy test investigates the importance of the influence of autonomous variables exclusively or to a large extent. The t-test H0 is β_i=0, the independent variable I in the evaluated

evidence has no significant impact; HA is $\beta_i \neq 0$: independent variable I in the evaluated display has a noteworthy impact. H0 will be recognized if the p-value, likelihood, or measured experimental centrality is $t > \alpha$; H0 will be rejected if the p(value) value, likelihood, or measured noteworthiness is $t < \alpha$. The results of the impact legitimacy test can be seen in Table 3.

Table 3. Validity Test Results of Influence

Variable	Sig.t	Criteria	Conclusion
RIMB	0,0069	< 0,01	Significant at α 0.01
RK	0,0166	< 0,05	Significant at α 0.05
RP	0,0093	< 0,01	Significant at α 0.01
RPKB	0,2081	> 0,10	Not Significant
RPKD	0,3509	> 0,10	Not Significant

Source**:** Appendix, processed.

Interpretation of the Effect of Independent Variables

The effectiveness test in Table 3 shows that building permit fees, cleaning fees, and parking fees have a positive impact on local government revenue. On the other hand, from 2019 to 2021, in 26 regencies/municipalities in Central Java, income tax on state-owned enterprises and motor vehicle tax have no impact on local government revenue. The variable Building Permit Retribution has a regression coefficient of 1.10E-08 (0.0000000110), with a linear-linear relationship pattern. This means that if Building Permit Retribution faces an increase of 1 million rupiahs, PAD will face an increase of 1.10E-08 billion rupiahs.

The variable Cleaning Retribution has a regression coefficient value of 7.94E-08 (0.0000000794), with a linear-linear relationship pattern. This means that if the Cleaning Levy faces an increase of 1 million rupiahs, the PAD will face an increase of 7.94E-08 billion rupiahs. The variable Parking Retribution has a regression coefficient value of 954E-08 (0.0000000954), with a linear-linear relationship pattern. This means that if the parking levy faces an increase of 1 million rupiahs, PAD will face an increase of 954E-08 billion rupiahs.

Economic Interpretation

PAD in 26 districts/municipalities of Central Java Province during 2019-2021 was only driven by Building Permit Levy, Cleaning Levy, and Parking Levy. Meanwhile, Retribution on the Use of Regional Wealth and Retribution on Motor Vehicle Testing have no influence on PAD.

Cleaning Levies

Reflecting the rapid development of cities in recent years, the cleaning tax has had a positive impact on the intrinsic revenue of the 26 districts/cities in Central Java. The need for cleaning services continues to increase as more waste is generated due to population growth. Cleaning fees are well-optimised by the Central Java district/city governments. Various variables that encourage the implementation of the cleaning tax policy include power in the waste management policy, the Central Java Regency / City Cleanliness and Parks Office, and the Central Java Regency / City BPPT in collecting cleaning fees. including cooperation in the payment of cleaning fees, and the development of private parties in the field of waste services.

This study is in line with a study conducted by [8] who found that cleaning fees have a positive impact on PAD in Palu City. [9]also found that cleaning fees had a positive effect on PAD in the Lebak district. In accordance with the results of a study conducted by [10] through willingness to pay, the retribution rate indirectly has a large influence on the target Garbage/Cleaning PAD Retribution target.

Retribution to Building Construction Permit

Based on the analysis conducted, the result is consistent with the hypothesis that retribution on building construction permits has a positive impact on local revenue in 26 regencies/municipalities in Central Java. The statement shows that the realization of IMF revenue in Central Java provinces/municipalities is in line with what is desired in terms of both quantity and quality. Quantitatively, IMF tax revenue meets the set target almost every year. Even in terms of quality, there will be many buildings built at cost, because there is already an IMB. This situation will also affect the high contribution of IMF levies from residential buildings and business services built by the public sector, private sector, or contractors. This statement shows that the IMF service policy implemented in districts/municipalities in Central Java has encouraged an increase in the productivity of IMF documents.

This study is in line with a study conducted by [11] which found that Building Permit Retribution has a positive impact on PAD. [12] also found that Retribution for Building Permit has a positive impact on PAD. [13] the study found the same thing that the Building Permit levy has a positive impact on PAD.

Parking Levy

The results prove that parking fees have a positive impact on local revenue. This is because the Ministry of Transport is responsible for planning and implementing the plan successfully. This is evidenced by the initial planning of district/city transport services in Central Java, defining the objectives to be achieved. The Central Java District Transport Offices determine who receives parking retaliation services by gathering information that can be used in the future as estimates and forecasts. Further evidence is the Department of Transport's second plan, the determination of the programs that will take place in the following year to realize the defined objectives. When setting activities, the Department also collects and analyses information, considers the objectives to be achieved, and determines which programs are appropriate to the circumstances to be met. However, according to the Ministry of Transport, there are no major changes in the conditions, and the program arrangements are almost the same as last year. This study is in line with the study conducted by [14]which found that parking fees have a positive impact on PAD. [15] also found that parking fees have a positive impact on PAD. [16]research found the same thing that parking fees have a positive effect on PAD.

4.   CONCLUSION

The Fixed Effect Model (FEM) was selected as the best estimate. The fit test for the FEM estimation model shows that the FEM estimation model exists with a coefficient of determination (R^2) of 0.989513, meaning that 99% of the variation in the PAD variable is explained by the building construction permit variable. Motor Vehicle Levies, Cleaning Levies, Parking Levies, Vehicle Testing Levies, Public Goods Usage Levies. The remaining 0.01% is influenced by other variables not included in the model. The results of the impact validity test (t-test) show that the independent variables that affect the net regional income of 26 districts/cities in Central Java from 2019 to 2021 are building permit fees, cleaning fees, parking fees, and others. Meanwhile, local property utilization tax and vehicle inspection tax do not affect local revenue. Given that the impact of cleaning fees on local revenue is very significant, it is recommended that the Regency / City in Central Java can improve waste/cleaning services, improve responsiveness and prevent rampant littering in the next few years. is expected to be Promoting the active role of the community, the role of mass media, youth, community organizations, and informal leaders is seen as motivational and very strategic in every context. The addition of cleaning facilities and infrastructure is done to improve cleaning services and the beauty of the city. It is necessary to increase the knowledge and skills of staff and create good coordination between related agencies to improve performance and increase the number of staff, especially for cleaning services and the preparation of appropriate legal products. Since the independent factors used in this study cannot fully explain the Local Revenue figures, further research is believed to clarify the calculation of Local Revenue by using other factors that are more complex and measurable. The first range is within the larger zone. In addition, it is hoped that future analysts will be able to use complex and precise explanatory tools to clarify the drivers of territorially unique wages in the local short and long term.

REFERENCES

[1]   B. Asteria, "Analisis Pengaruh Penerimaan Pajak Daerah Dan Retribusi Daerah Terhadap Pendapatan Asli Daerah Kabupaten/Kota Di Jawa Tengah.," *Jurnal Riset Manajemen Sekolah Tinggi Ilmu Ekonomi Widya Wiwaha Program Magister Manajemen*, vol. 2, no. 1, pp. 51–61, 2015.

[2]   S. Amalia, "Analisis Efektivitas dan Potensi Retribusi Daaerah terhadap Pendapatan Asli Daerah (PAD) di Kota Banjarmasin.," *JIEP.*, vol. 1, no. 1, pp. 119-132., 2018.

[3]   D. A. Wulandari and A. Kartika, "Pengaruh Penerimaan Pajak Hotel dan Restoran serta Retribusi Daerah Terhadap Pendapatan Asli Daerah.," *Derivatif: Jurnal Manajemen*, vol. 15, no. 2, 2021.

[4]   T. Erawati and M. Hurohman, "Pengaruh Pajak Hotel, Pajak Penerangan Jalan, Pajak Reklame, Dan Retribusi Pelayanan Persampahan/Kebersihan Terhadap Pendapatan Asli Daerah Kabupaten Bantul.," *Akuntansi Dewantara*, vol. 1, no. 2, pp. 127–137, 2017.

[5]   W. M. Syarpati, "Efektivitas Dan Kontribusi Penerimaan Retribusi Pemakaian Kekayaan Daerah Terhadap Pendapatan Asli Daerah.," *JIEM – Jurnal Ilmu Ekonomi Mulawarman*, vol. 1, no. 1, 2016.

[6]   R. Hutabalian, "Pengaruh Retribusi Izin Mendirikan Bangunan Terhadap Pendapatan Asli Daerah Di Kabupaten Keerom.," *Jurnal Pro Hukum : Jurnal Penelitian Bidang Hukum Universitas Gresik,* vol. 11, no. 4, pp. 300–307, 2022.

[7]   S. Hayati, "Efektivitas dan Kontribusi Penerimaan Retribusi Parkir terhadap Pendapatan Asli Daerah Kabupaten Seruyan.," *Jurnal Terapan Manajemen dan Bisnis.*, vol. 2, no. 1, 2016.

[8]   A. Widodo, "Analisis Implementasi Kebijakan Retribusi Kebersihan dan Kontribusinya Terhadap Pendapatan Asli Daerah Kota Palu.," *Jurnal Katalogis.*, vol. 6, no. 1, pp. 11-22., 2018.

[9]   M. Smith and M. Karimah, "Kontribusi Retribusi Kebersihan Terhadap Pendapatan Asli Daerah (Pad) Pada Dinas Kebersihan Kabupaten Lebak.," *The Asia Pacific Journal of management Studies.*, vol. 4, no. 3, pp. 117-122., 2017.

[10]   A. G. Kumenaung and I. P. F. Rorong, "Faktor-Faktor yang Mempengaruhi Pencapaian target PAD Retribusi Persampahan/Kebersihan di Kota manado.," *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah.*, vol. 24, no. 1, 2023, doi: https://doi.org/10.35794/jpekd.44206.24.1.2023.

[11]   H. Djanggih and K. Ahmad, "Implementasi Penarikan Retribusi Izin Mendirikan Bangunan terhadap Realisasi Pendapatan Asli Daerah.," *Jurnal Kertha Patrika*, 2020.

[12]   F. F. Wilar, "Analisis Kontribusi Retribusi Izin Mendirikan Bangunan terhadap Pendapatan Asli Daerah Kota Tomohon.," *Jurnal Manajemen dan Bisnis*, vol. 3, no. 3, 2018.

[13]   R. Refandy., S. Subarkah, and S. Suparnyo, "Kebijakan Peningkatan Pemungutan Ijin Mendirikan Bangunan (IMB) sebagai Upaya Peningkatan Pendapatan Asli Daerah (PAD) di Kabupaten Kudus.," *Jurnal Suara Keadilan,* vol. 19, no. 2, 2018.

[14]   V. K. Rumengan, I. Rachman, and N. Kumayas, "Pengelolaan retribusi parkir dalam meningkatkan pendapat asli daerah kabupaten minahasa.," *Jurnal Eksekutif*, vol. 2, no. 5, 2020.

[15]   V. M. Tulandi, H. Sabijono, and S. Rondonuwu, "Analisis efektivitas pajak parkir dan kontribusinya terhadap pendapatan asli daerah (PAD) Kota Kotamobagu.," *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi,* vol. 8, no. 4, 2020.

[16]   H. H. Ekaryn, A. R. Herawati, and D. Hariani, "Manajemen Parkir untuk Peningkatan Pendapatan Asli Daerah (PAD) di Dinas Perhubungan Kota Semarang.," *Jurnal Ilmiah Mahasiswa.*, vol. 11, no. 3, 2021.