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The Mapping of Regional Tax and Levy in Pangkalpinang

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Abstract: Regional autonomy provides opportunities and challenges for Regional Governments to manage and explore sources of Regional Revenue. As the Capital of the Province, Pangkalpinang still relies on transfers, fund and yet their regional revenue is very low. This study tries to identify and map tax and levy revenues in Pangkalpinang and then formulate strategic recommendations that the Government may consider increasing regional revenue. This study analyzes the effectiveness, contribution, and growth of regional tax and retribution revenue in Pangkalpinang between 2016 and 2020. The contribution and growth analysis results are the basis for the Klassen analysis. This study's results indicate that tax revenue's effectiveness in the Pangkalpinang rate is 114.54%, while the effectiveness of retribution is 96.61%. The regional tax revenue with the largest contribution is street lighting tax, which contributes 36.49%. In contrast, the largest contribution of retribution is the revenue from the use of regional wealth, which is 25.05%. Based on Klassen's analysis, knowing that four sectors are in the developing category, four sectors are in the advanced but depressed category, five sectors are in the potential category, and the remaining nineteen sectors are in the lagging category. Therefore, the researcher suggests that the Government focus on developing and developing depressed sectors if they want to increase local tax and retribution revenues in the short term. However, they must focus on developing potential sectors if they're going to increase regional tax and levy revenues long-term.

Keywords: tax; retribution; regional revenue

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1. Introduction

The purpose of regional development is to encourage regional economic growth, provide and create quality job opportunities through a wider variety of job opportunities, and improve the welfare and quality of life of the community (Siregar et al., 2021). The welfare and quality of life of the community will accelerate regional development (Gennaioli et al., 2013). Law No. 23 of 2014 concerning Regional Government allows local governments to manage their household and finances, including exploring the potential for regional revenue (PAD). The flexibility of the Regional Government in exploring the potential of PAD is strengthened by Law No. 28 of 2009 concerning Regional Taxes and Levies. With this regulation, it is hoped that the local government will play its role in regional development (Rodríguez-Pose, 2013).

Regional revenue sources include regional taxes, regional levies, separated wealth management results, and other legitimate regional revenues (Mardiasmo, 2019). The regional government has the right to impose regional taxes and levies on all citizens who are within the territory of its government. Thus, it is hoped that local governments will be able to take policies that take into account the interests, prosperity, and welfare of the community by formulating fair regulations in the context of collecting regional taxes and levies in their territory (P. A. Wulandari & Iryanie, 2018). Furthermore, local governments are expected to be able to manage and allocate the results of local taxes and levies to realize development and support the needs of the local government itself (Ismail, 2018). Local governments are also required to develop and optimize all potential regional revenues to finance household needs and sustainable regional development (Dobrovič et al., 2016; Hall & Kanaan, 2021; Ofoegbu et al., 2016; Wirawan, 2018). The ability of local governments to manage and explore the potential for local revenue will also have an impact on reducing poverty levels (Sandjaja et al., 2020). Some of the components of regional revenue are regional taxes, regional levies, the results of separated regional wealth management, and other legitimate regional revenues. The components of the regional revenue, especially regional taxes and regional levies are expected to contribute to increasing regional revenue positively.

Pangkalpinang City, as the Capital City of the Bangka Belitung Islands Province, still has a large dependence on transfer funds to finance the Regional Budget. Consecutively from 2016 to 2020, the number of transfer funds was 79.67% for 2016, 65.86% for 2017, 68.09% for 2018, 62.82% for 2019, and 62.32% for 2020, or on average, between 2016 and 2020, the proportion of transfer funds received by Pangkalpinang City is 67.75%. According to Banga (2017), the level of dependence of the City of Pangkalpinang on transfer funds to finance the Regional Budget is still very high. For comparison, the contribution of Regional Revenue to total revenue in the Regional Budget of Pangkalpinang City between 2016 and 2020 is as follows. In 2016, the contribution of Regional Revenue to the Regional Budget was 14.82%; in 2017, it was 20.03%. In 2018, it was 18.26%; in 2019, it was 16.93%; in 2020, it was 16.71%. Between 2016 and 2020, the contribution of Regional Revenue to the Regional Budget of Pangkalpinang City was 17.35%. This figure is classified as a very low category (Halim, 2013) for the contribution of Regional Revenue to the Regional Budget.

Based on these data, it is known that the contribution of the Regional Revenue of Pangkalpinang City to the Regional Budget is still very low. So, Pangkalpinang City Government needs to conduct a study to increase the contribution of Regional Revenue to the Regional Budget. Research results (Handoyo et al., 2021) found that regions with higher self-reliance will find it easier to overcome and reduce poverty levels. Therefore, the Pangkal Pinang City Government needs to increase its independence in financing the Regional Budget because it has a broad impact (Tan, 2020). Furthermore, to increase Regional Revenue, it is necessary to study the potential of Regional Revenue. Good potential mapping is expected to result in optimal revenue realization supported by adequate systems, procedures, and policies

(Addison et al., 2018; Ivanov et al., 2016; von Haldenwang et al., 2014; Yadav & Kumar, 2018). With the study conducted, it is hoped that regional revenue can be identified and mapped, which consists of potential regional taxes and levies, so that it can be seen how much potential revenue can be extracted, developed, and managed professionally. To be able to realize the ideals of increasing regional revenue, the Pangkalpinang City Government needs to take policies that are supported by adequate regulations as the basis for the efforts made (Sudrajat & Andhika, 2021).

2. Methods

This study uses a quantitative and qualitative approach. Budget data and realization of Pangkalpinang City Regional Taxes and Levies are obtained from the Pangkalpinang City Regional Budget from 2016 to 2020. The quantitative approach analyzes the contribution of taxes and levies to Pangkalpinang City's Regional Revenue, the growth of Pangkalpinang City's tax and levy revenue, and the effectiveness of tax and levy revenues. Pangkal Pinang City. Using Klassen analysis, the contribution and growth analysis results are used to map the potential and make projections of Pangkalpinang City's tax and retribution revenue. A qualitative approach is used to interpret the results of focus group discussions (FGD) with stakeholders and the results of a literature study which includes reviewing previous research and comparative studies with other regions to formulate policies to increase tax and levy revenues in Pangkalpinang City.

Table 1. Research Analysis

Analysis	Description	Formula
Effectiveness	Regional Revenue	$\frac{\text{Realization of Regional Revenue}}{\text{Target Receipt of Regional Revenue}} \times 100\%$
	Tax Revenue	$\frac{\text{Realization of Tax Revenue}}{\text{Target Receipt of Tax}} \times 100\%$
	Receipts of Levy	$\frac{\text{Realization of Levy Receipt}}{\text{Levies Revenue Target}} \times 100\%$
Contribution	Regional Revenue Against Regional Budget	$\frac{\text{Regional Revenue}}{\text{Regional Budget}} \times 100\%$
	Tax on Regional Revenue	$\frac{\text{Tax Receipt}}{\text{Regional Revenue}} \times 100\%$
	Levy Against Regional Revenue	$\frac{\text{Receipt of Levy}}{\text{Regional Revenue}} \times 100\%$
	Components of Taxes and Levies on Regional Revenue	$\frac{\text{Tax / Levy Component}}{\text{Total Tax / Levy}} \times 100\%$
Growth	Regional Revenue Growth	$\frac{\text{PAD}_t - \text{PAD}_{t-1}}{\text{PAD}_{t-1}} \times 100\%$
	Tax Revenue Growth	$\frac{\text{Tax Receipt}_t - \text{Tax Receipt}_{t-1}}{\text{Tax Receipt}_{t-1}} \times 100\%$
	Regional Revenue Growth	$\frac{\text{Receipt of Levy}_t - \text{Receipt of Levy}_{t-1}}{\text{Tax Receipt}_{t-1}} \times 100\%$
Mapping and Strategy	Klassen Model	Mapping Regional Taxes and Levies based on Contribution and Growth
Projections and Opportunities	Trend Model	$X_t = \alpha + \beta_t + \varepsilon$
Focus Group Discussion (FGD)		
Comparative Study of Innovative Best Practice Based Collection		

Cooper and Schindler (2014) state that the population is a collection of all elements from which we are trying to conclude. Population refers to a group, event, or thing that attracts researchers to deeper research (Sekaran & Bougie, 2016). The population of this research study was Pangkalpinang City's tax and levy income. In contrast, the sample used in this study was Pangkalpinang City's tax and levy revenue between 2016 and 2020.

The data used in this study was secondary data collected from the Pangkalpinang City Regional Development Planning and Research Agency in the form of tax revenue data, retribution receipts, Regional Revenue (PAD), as well as other information contained in the Regional Budget (APBD) of Pangkalpinang City between years 2016 to 2020. The analysis used in this study is an analysis of the contribution, growth, effectiveness, and projections of Pangkalpinang City's tax and user charges. In addition, discussions with stakeholders were also carried out, and a literature review for a more detailed explanation can be seen in the Table 1.

3. Results and Discussion

The Pangkalpinang City Tax and Levy Study are analyzed based on data from Pangkalpinang City's tax and levy revenue for 2016 to 2020. The analysis used is an analysis of effectiveness, contribution, growth rate, and projections for the next five years.

3.1. Effectiveness Analysis

Effectiveness analysis is done by comparing the realization of tax and levy revenues with the budgeted value. The following is a table of the analysis of the effectiveness of Pangkalpinang City's tax and levy revenues from 2016 to 2020.

Table 2. The Effectiveness of Pangkalpinang City's Tax and Levy Receipts in 2016–2020

	2016	2017	2018	2019	2020	Average
Regional Tax Revenue	122.62%	125.54%	115.67%	103.52%	105.32%	114.54%
Hotel Tax	127.61%	115.04%	147.61%	127.93%	107.02%	125.04%
Restaurant tax	122.58%	124.82%	137.83%	123.93%	112.17%	124.27%
Entertainment Tax	113.80%	127.10%	135.08%	102.76%	107.39%	117.23%
Advertisement Tax	133.57%	137.01%	124.02%	104.59%	104.89%	120.81%
Street Lighting Tax	105.01%	111.56%	111.34%	102.55%	100.63%	106.22%
Parking Tax	96.53%	101.94%	110.37%	122.46%	97.50%	105.76%
Underground Water Tax	114.06%	116.10%	101.20%	100.65%	105.84%	107.57%
Swallow's Nest Tax	134.31%	156.67%	105.30%	133.45%	124.86%	130.92%
Non-Metal and Rock Mineral Tax*	141.68%	53.73%	150.61%	89.85%	-	108.97%
Rural and Urban Land and Building Tax	156.81%	139.56%	91.32%	86.91%	106.82%	116.29%
Fees for Acquisition of Rights on Land and Buildings	124.49%	154.73%	117.99%	101.02%	113.57%	122.36%
Regional Levy Revenue	113.10%	92.40%	108.35%	83.63%	85.55%	96.61%
Health Service Levy	108.45%	85.85%	82.51%	119.91%	152.90%	109.92%
Garbage/Cleaning Service Levy	97.74%	105.13%	102.68%	122.16%	103.66%	106.27%
Public Roadside Parking Service Levy	102.28%	124.71%	108.20%	71.61%	43.52%	90.06%
Market Service Levy	155.64%	95.22%	103.29%	82.69%	72.53%	101.87%
Motor Vehicle Testing Levy	82.56%	82.29%	94.28%	90.98%	143.49%	98.72%
Fire Extinguisher Inspection	0.00%	22.19%	112.10%	120.10%	81.12%	67.10%
Toilet Provision and/or Vacuuming Levy	103.33%	65.64%	100.27%	37.50%	105.00%	82.35%
Calibration/Recalibration Service Levy*	0.00%	0.00%	154.19%	121.72%	0.00%	-

Table 2. The Effectiveness of Pangkalpinang City's Tax and Levy Receipts in 2016–2020

	2016	2017	2018	2019	2020	Average
Use of Regional Wealth Levy	131.54%	106.86%	100.67%	109.46%	92.04%	108.11%
Wholesale Market and/or Shops Levy	103.97%	80.32%	99.38%	68.28%	63.90%	83.17%
Terminal Levy	103.90%	84.63%	72.64%	65.14%	98.94%	85.05%
Special Parking Area Levy	100.00%	99.58%	114.52%	99.82%	126.86%	108.15%
Slaughterhouse Levy	93.95%	106.23%	96.90%	79.47%	106.58%	96.63%
Recreational and Sports Place Levy	85.77%	124.75%	103.40%	65.61%	192.73%	114.45%
Sales of Regional Business Production Levy	102.95%	80.00%	80.68%	107.15%	12.10%	76.57%
Building Permit Levy	100.39%	73.66%	130.73%	54.77%	71.14%	86.14%
Alcoholic Beverage Sales Permit Levy*	100.00%	-	-	-	-	-
Distraction Permit Levy**	138.84%	81.92%	260.00%	17.92%	-	124.67%
Route Permit Levy	95.04%	45.33%	13.73%	90.83%	27.48%	54.48%
Fishery Permit Levy*	18.75%	0.00%	0.00%	0.00%	0.00%	-
Extension of Permit to Employ Foreign Workers Levy*	0.00%	0.00%	67.93%	0.00%	0.00%	-

Source: Regional Budget of Pangkalpinang City (processed)

* The average effectiveness is not calculated due to incomplete data on tax and/or user charges.

** The nuisance permit levy is still included in the effectiveness analysis even though the tax and/or levy revenue data is incomplete.

The effectiveness of Pangkalpinang City's 2016–2020 tax revenues on average is 114.54%. This shows that the overall postal tax revenue of Pangkalpinang City has reached and even exceeded the set budget. The highest effectiveness is found in swallow nest tax revenues of 130.92%, followed by hotel tax revenues of 125.04% and restaurant taxes of 124, 27%. In contrast, the lowest effectiveness on parking tax receipts is 105.76%. Even though the parking tax is the lowest effective tax revenue post, if it is seen from the realization of the budgeted target of the parking tax, it still has good performance because the realization figure has exceeded the budget figure. On average, the effectiveness of Pangkalpinang City retribution revenue from 2016-2020 is 96.61%. The highest effectiveness receives retribution for recreation and sports at 114.45%, followed by health service retribution at 109.92% and retribution for the use of regional wealth at 108.11%. In comparison, the lowest effectiveness receives route permit retribution which only has average effectiveness of 54.48%.

3.2. Contribution Analysis

Contribution analysis calculates how much each postal tax and levy revenue contributes to the total tax and levy revenue. Contribution analysis is carried out by calculating the proportion of revenue from each regional tax and levy to the total revenue from regional taxes and levies. In order to be more proportional, the contribution analysis is separated between tax receipts and levy receipts. The results of the contribution analysis will be used in the Klassen analysis to classify Pangkalpinang City's tax and levy receipts. The following is a table of the results of the analysis of the contribution of Pangkalpinang City tax and levy revenues in the analysis period from 2016 to 2020.

Table 3. Pangkalpinang City Tax and Levy Revenue Contribution 2016–2020

	2016	2017	2018	2019	2020	Average
Regional Tax Revenue	100%	100%	100%	100%	100%	100%
Hotel Tax	3.87%	2.74%	10.25%	6.11%	3.02%	5.20%
Restaurant tax	8.36%	7.88%	18.40%	11.68%	12.94%	11.85%
Entertainment Tax	2.76%	2.72%	5.81%	3.10%	2.00%	3.28%

Table 3. Pangkalpinang City Tax and Levy Revenue Contribution 2016–2020

	2016	2017	2018	2019	2020	Average
Advertisement Tax	5.27%	4.89%	7.03%	4.62%	5.23%	5.41%
Street Lighting Tax	31.84%	35.86%	29.29%	39.03%	46.44%	36.49%
Parking Tax	0.33%	0.24%	0.21%	0.34%	0.84%	0.39%
Underground Water Tax	0.52%	0.41%	0.04%	0.39%	0.41%	0.35%
Swallow's Nest Tax	0.12%	0.11%	0.04%	0.09%	0.10%	0.09%
Non-Metal and Rock Mineral Tax*	6.44%	1.92%	11.98%	0.28%	0.01%	4.13%
Rural and Urban Land and Building Tax	17.83%	13.29%	11,71%	11.51%	13.01%	13.47%
Fees for Acquisition of Rights on Land and Buildings	22.65%	29.93%	25.17%	22.85%	16.01%	23.32%
Regional Levy Revenue	100%	100%	100%	100%	100%	100%
Health Service Levy	0.77%	0.79%	0.75%	1.61%	1.92%	1.17%
Garbage/Cleaning Service Levy	10.19%	11.86%	11.99%	17.83%	24.38%	15.25%
Public Roadside Parking Service Levy	5.33%	7.50%	8.19%	8.06%	5.12%	6.84%
Market Service Levy	5.41%	4.30%	4.83%	5.52%	5.69%	5.15%
Motor Vehicle Testing Levy	3.44%	3.71%	3.67%	3.79%	2.70%	3.46%
Fire Extinguisher Inspection	0.00%	0.09%	0.26%	0.31%	0.32%	0.20%
Toilet Provision and/or Vacuuming Levy	0.11%	0.15%	0.20%	0.06%	0.08%	0.12%
Calibration/Recalibration Service Levy*	0.00%	0.42%	0.58%	1.73%	0.50%	0.64%
Use of Regional Wealth Levy	23.88%	21.91%	21.34%	25.28%	32.85%	25.05%
Wholesale Market and/or Shops Levy	5.78%	6.64%	6.64%	6.84%	4.01%	5.98%
Terminal Levy	0.58%	0.64%	0.57%	0.56%	0.36%	0.54%
Special Parking Area Levy	3.60%	4.12%	4.90%	4.71%	3.48%	4.16%
Slaughterhouse Levy	1.80%	2.63%	2.62%	2.92%	2.55%	2.50%
Recreational and Sports Place Levy	1.79%	2.81%	2.46%	1.64%	0.83%	1.91%
Sales of Regional Business Production Levy	0.07%	0.06%	0.06%	0.09%	0.09%	0.08%
Building Permit Levy	17.45%	16.62%	30.64%	18.73%	15.06%	19.70%
Alcoholic Beverage Sales Permit Levy*	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Distraction Permit Levy**	19.30%	15.40%	0.02%	0.01%	0.00%	6.95%
Route Permit Levy	0.50%	0.34%	0.14%	0.30%	0.06%	0.27%
Fishery Permit Levy*	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Extension of Permit to Employ Foreign Workers Levy*	0.00%	0.00%	0.13%	0.00%	0.00%	0.03%

Source: Regional Budget of Pangkalpinang City (processed)

* It was not included in the contribution analysis due to incomplete revenue data.

** Levy. Nuisance Permits in 2018, there was a change in regulations, so there was a significant decrease.

Based on the contribution analysis carried out, it can be seen that the highest contribution to Pangkalpinang City's tax revenue between 2016 and 2020 is the street lighting tax which contributes 36.49% to Pangkalpinang City's tax revenue, followed by income from the Land and Building Rights Acquisition Fee (BPHTB) 23.32%. Furthermore, it is occupied by Rural and Urban Land and Building Tax receipts, which contributed 13.47% of the total tax revenue of Pangkalpinang City in the period 2016 to 2020. On the other hand, the lowest contribution was in the swallow's nest tax revenue post, which contributed 0.09%, followed by revenue underground water tax is 0.35%, and parking tax revenue is 0.39%.

The contribution of levy receipts to Pangkalpinang City's total levy receipts in the period 2016 to 2020 illustrates that the largest contribution of levy revenues is levy

receipts using regional assets of 25.05% or more than a quarter of the total levy receipts of Pangkalpinang City in the period from 2016 to 2020. This is followed by the receipt of the building permit levy, which contributes 19.70%, and the waste management/cleaning levy, which contributes 15.25%. The lowest contribution from levy revenue is in the post of levy revenue from sales of regional business production of 0.08%. This is followed by the levy of supplying and/or desludging the latrines by 0.12% and acceptance from the levy of inspection of fire extinguishers by 0.20%.

3.3. Growth Analysis

Growth analysis is carried out by calculating the change (increase/decrease) in Pangkalpinang City tax and levy revenue posts between 2016 and 2020. The growth analysis results will be used in Klassen's analysis as an indicator in the classification of Pangkalpinang City's tax and levy revenue posts. The following is a table of the results of the analysis of the growth of tax and levy revenue in Pangkalpinang City between 2016 and 2020.

Table 4. Growth of Pangkalpinang City Tax and Levy Revenue in 2016–2020 (in a Million)

	2016	2017	2018	2019	2020	G
Regional Budget of Pangkalpinang	919.250	868.376	915.529	916.390	843.377	-2%
Regional Revenue	102.649	173.947	167.131	155.116	140.964	8%
Regional Tax Revenue	65.953	84.002	85.749	90.644	78.015	4%
Hotel Tax	2.552	2.300	3.690	5.539	2.354	-2%
Restaurant tax	5.516	6.615	7.787	10.583	10.095	16%
Entertainment Tax	1.820	2.287	2.600	2.812	1.557	-4%
Advertisement Tax	3.472	4.110	4.216	4.183	4.078	4%
Street Lighting Tax	21.001	30.121	33.402	35.380	36.227	15%
Parking Tax	217	203	253	312	658	32%
Underground Water Tax	342	348	354	357	317	-2%
Swallow's Nest Tax	80	94	83	80	74	-2%
Non-Metal and Rock Mineral Tax	4.250	1.611	4.141	256	10	-78%
Rural and Urban Land and Building Tax	11.761	11.164	10.044	10.429	10.148	-4%
Fees for Acquisition of Rights on Land and Buildings	14.938	25.143	19.173	20.709	12.493	-4%
Regional Levy Revenue	14.386	13.297	13.217	11.987	12.754	-3%
Health Service Levy	110	105	99	192	244	22%
Garbage/Cleaning Service Levy	1.466	1.576	1.584	2.137	3.109	21%
Public Roadside Parking Service Levy	767	997	1.082	966	652	-4%
Market Service Levy	778	572	638	661	725	-2%
Motor Vehicle Testing Levy	495	493	484	454	344	-9%
Fire Extinguisher Inspection	-	12	34	37	40	50%
Toilet Provision and/or Vacuuming Levy	15	19	25	7	10	-9%
Calibration/Recalibration Service Levy*	-	55	77	206	63	5%
Use of Regional Wealth Levy	3.435	2.913	2.821	3.031	4.190	5%
Wholesale Market and/or Shops Levy	831	883	878	819	511	-11%
Terminal Levy	83	84	74	67	45	-14%
Special Parking Area Levy	518	547	648	564	444	-4%
Slaughterhouse Levy	258	349	346	349	325	6%
Recreational and Sports Place Levy	257	374	325	196	106	-20%

Table 4. Growth of Pangkalpinang City Tax and Levy Revenue in 2016–2020 (in a Million)

	2016	2017	2018	2019	2020	G
Sales of Regional Business Production Levy	10	8	8	10	12	4%
Building Permit Levy	2.509	2.209	4.049	2.245	1.920	-6%
Alcoholic Beverage Sales Permit Levy*	1	-	-	-	-	-
Distraction Permit Levy**	2.776	2.048	2	-	-	-
Route Permit Levy	71	44	18	36	8	-42%
Fishery Permit Levy*	-	-	-	-	-	-
Extension of Permit to Employ Foreign Workers Levy*	-	-	17	-	-	-

Source: Regional Budget of Pangkalpinang City (processed)

*It is only analyzed for its growth but is not included in the calculation of the average growth in the Klassen analysis due to incomplete data and too extreme values.

From 2016 to 2020, the Regional Budget of Pangkalpinang City had negative growth of -2%, while the growth of the Regional Revenue of Pangkalpinang City showed positive growth of 8%. This indicates that Pangkalpinang City is in the right direction in increasing regional financial independence through increasing Regional Revenue.

The overall tax revenue of Pangkalpinang City between 2016 and 2020 grew by 4%. For each Pangkalpinang City tax revenue post between 2016 and 2020, the highest tax revenue growth was in the Parking Tax revenue post at 32%. This is the result of the Pangkalpinang City Government's hard work in providing parking bag locations in strategic places. After that, it is followed by the receipt of the Restaurant Tax and the receipt of the Street Lighting Tax. The tax revenue post that has the lowest growth is the Non-Metal Mineral and Rock Tax revenue post, which has a growth of -78%. This is due to a change in regulations where those entitled to collect Tax on Non-Metal Minerals and Rocks are the areas where the minerals and/or rocks are mined.

The growth of Pangkalpinang City levy receipts between 2016 and 2020 as a whole was -3%, while the highest growth for each post was in the receipt of the Fire Extinguisher Inspection Levy, which was 50%, followed by the acceptance of the Health Service Levy by 22% and Levy's revenue from Waste and Cleaning Services is 21%. The post of retribution receipts with the lowest growth was in the Route Permit Levy with the growth of -42%, Recreational and Sports Venue Retribution at -20%, and Levy Terminal at -14%. The three levy reception posts with the lowest growth had negative growth values, meaning that the trend decreased between 2016 and 2020 due to the Covid-19 outbreak. These results are in line with the research results (Reniasi et al., 2019).

3.4. Klassen Analysis

Klassen's analysis was conducted by measuring the contribution and growth of each tax and levy revenue post and then compared with the average of the overall tax and/or levy revenue. The average contribution and growth of tax and/or levy revenue becomes the reference value for each post to place tax and/or levy revenue posts into four categories.

Table 5. Klassen Analysis

GROWTH		
CONTRIBUTION	Growth (Δ) Tax/Levy Analysis < Total Tax Growth/Benchmark Levy	Growth (Δ) \Tax/Levy Analysis > Total Tax Growth/Benchmark Levy

Table 5. Klassen Analysis

GROWTH		
CONTRIBUTION	Growth (Δ) Tax/Levy Analysis < Total Tax Growth/Benchmark Levy	Growth (Δ) \Tax/Levy Analysis > Total Tax Growth/Benchmark Levy
Tax Contribution/Levy Analysis < Total Tax Contribution/Benchmark Levy	Relatively Left Behind the Sector <ul style="list-style-type: none"> • Hotel Tax • Entertainment Tax • Advertisement Tax • Underground Water Tax • Swallow's Nest Tax • Non-Metal and Rock Mineral Tax • Motor Vehicle Testing Levy • Toilet Provision and/or Vacuuming Levy • Calibration/Recalibration Service Levy • Terminal Levy • Special Parking Area Levy 	Potential <ul style="list-style-type: none"> • Parking Tax • Health Service Levy • Slaughterhouse Levy • Sales of Regional Business Production Levy • Market Service Levy
Tax Contribution/Levy Analysis > Total Tax Contribution/Benchmark Levy	Forward but Depressed <ul style="list-style-type: none"> • Rural and Urban Land and Building Tax • Fees for Acquisition of Rights on Land and Buildings Public Roadside Parking Service Levy • Building Permit Levy 	Forward and Growth Fast <ul style="list-style-type: none"> • Street Lighting Tax • Restaurant Tax • Garbage/Cleaning Service Levy • Use of Regional Wealth Levy

The classification analysis divides Pangkalpinang City's tax and levy receipts into four categories, namely:

1. Progress and Grow Fast, which consists of:
 - a. Street Lighting Tax
 - b. Restaurant Tax
 - c. Garbage/Cleaning Services Levy
 - d. Use of Regional Wealth Levy
2. Forward but depressed, which consists of:
 - a. Rural and Urban Land and Building Tax
 - b. Land and Building Rights Acquisition Fee (BPHTB)
 - c. Roadside Parking Service Levy
 - d. Building Permit Levy
3. Potential (still can be improved), which consists of:
 - a. Parking Tax
 - b. Health Service Levy
 - c. Slaughterhouse Levy
 - d. Sales of Regional Business Production Levy
 - e. Market Service Levy
4. The relatively lagging sector consists of:
 - a. Hotel Tax
 - b. Entertainment Tax
 - c. Advertising Tax
 - d. Underground Water Tax
 - e. Swallow's Nest Tax
 - f. Non-Metal and Rock Mineral Tax
 - g. Motor Vehicle Testing Levy
 - h. Toilet Provision and/or Vacuuming Levy

- i. Calibration/Recalibration Service Levy
- j. Terminal Retribution
- k. Special Parking Area Levy
- l. Recreational and Sports Place Levy
- m. Alcoholic Beverage Sales Permit Levy
- n. Route Permit Levy
- o. Fishery Permit Levy
- p. Extension of Permit to Employ Foreign Workers Levy
- q. Fire Extinguisher Inspection
- r. Wholesale Market and/or Shops Levy
- s. Distraction Permit Levy

The distribution of tax and levy revenue posts is based on the value of the contribution and growth of tax and levy revenue between 2016 and 2020. The reference value for tax revenue contribution is 9.73%, and tax growth is 5%. While the reference value for the contribution of levy revenue is 6.15%, and the reference value for levy revenue growth is -4%.

3.5. Projection Analysis

The projection analysis carried out in this study is a projection analysis using a trend model. Trend analysis is used to estimate a condition in the future using existing information in the past. In this study, the data used as material for analysis is data on Pangkalpinang City's tax and retribution revenue between 2016 and 2020 which is used to project Pangkalpinang City's tax and levy revenue from 2021 to 2025. The following is a table of projection analysis results that were conducted.

Table 6. Projected Analysis of Pangkalpinang City Tax and Levy Revenue From 2021 to 2025 (in a Million)

	2021	2022	2023	2024	2025
Regional Budget of Pangkalpinang	861.465	855.236	825.746	809.614	808.114
Regional Revenue	153.671	153.845	143.384	142.256	139.668
Local Tax Revenue	82.553	83.500	80.682	79.068	78.326
Hotel Tax	3.448	3.296	2.833	2.469	2.383
Restaurant tax	8.267	8.557	8.777	8.868	9.498
Entertainment Tax	2.223	2.299	2.313	2.229	1.877
Advertisement Tax	4.014	4.120	4.124	4.103	4.080
Street Lighting Tax	31.271	33.283	33.927	34.000	33.599
Parking Tax	329	351	381	405	416
Underground Water Tax	343	344	343	341	338
Swallow's Nest Tax	82	82	80	80	80
Non-Metal and Rock Mineral Tax*	-	-	-	-	-
Rural and Urban Land and Building Tax	10.709	10.499	10.366	10.431	10.442
Fees for Acquisition of Rights on Land and Buildings	18.491	19.202	18.014	17.787	17.323
Regional Levy Revenue	13.128	12.877	12.793	12.707	12.855
Health Service Levy	150	158	169	183	180
Garbage/Cleaning Service Levy	1.975	2.076	2.176	2.295	2.321
Public Roadside Parking Service Levy	893	918	902	866	848
Market Service Levy	675	654	671	677	680

Table 6. Projected Analysis of Pangkalpinang City Tax and Levy Revenue From 2021 to 2025 (in a Million)

	2021	2022	2023	2024	2025
Motor Vehicle Testing Levy	454	446	437	427	422
Fire Extinguisher Inspection	-	-	-	-	-
Toilet Provision and/or Vacuuming Levy	15	15	15	12	14
Calibration/Recalibration Service Levy**	-	-	-	-	-
Use of Regional Wealth Levy	3.278	3.246	3.313	3.411	3.487
Wholesale Market and/or Shops Levy	784	775	753	728	711
Terminal Levy	71	68	65	63	62
Special Parking Area Levy	544	549	550	530	523
Slaughterhouse Levy	325	339	337	335	332
Recreational and Sports Place Levy	251	250	226	206	208
Sales of Regional Business Production Levy	9	9	10	10	10
Building Permit Levy	2.587	2.602	2.681	2.407	2.440
Alcoholic Beverage Sales Permit Levy**	-	-	-	-	-
Distraction Permit Levy*	-	-	-	-	-
Route Permit Levy	35	28	25	26	25
Fishery Permit Levy **	-	-	-	-	-
Extension of Permit to Employ Foreign Workers Levy **	-	-	-	-	-

Source: *Regional Budget of Pangkalpinang City (processed)*

*No projections are made due to regulatory changes significantly affecting tax/levy revenues.

**no projections are made due to incomplete tax/levy revenue data.

4. Conclusion

All tax revenue posts in Pangkalpinang City have a realization rate of 114.54%, which indicates that they have reached the budgeted target. This shows that its effectiveness between 2016-2020 has been very good. The highest effectiveness of the swiftlet tax is 130.92%, followed by the hotel tax of 125.04% and the restaurant tax of 124.27%. On the other hand, the effectiveness of the parking tax still has the lowest figure of 105.76%. The effectiveness of Pangkalpinang City's levy revenue from 2016-2020 is an average of 96.61%. The highest effectiveness is from retribution for recreation and sports of 114.45%, then health service levy by 109.92%, the use of regional wealth by 108.11%, and the lowest levy for route permits, whose effectiveness is only 54.48%.

Based on the analysis of the contribution to Pangkalpinang City's tax revenue between 2016-2020, street lighting tax contributed 36.49%, followed by income from Fees for Acquisition of Rights on Land and Buildings (BPHTB) 23.32%, followed by rural land and building taxes and 13.47% in urban areas, the lowest contribution is the swallow's nest tax levy post of 0.09% and underground water tax of 0.35% and parking tax of 0.39%. Based on the contribution of Pangkalpinang City's levy revenue for the 2016-2020 period, the largest revenue contribution from the use of regional wealth is 25.05%. Furthermore, the building permit levy contributed 19.70%, and the waste/cleanliness management levy contributed 15.25%. The lowest contribution was from the revenue from sales of regional business production levies, which was 0.08%. Furthermore, the levy for the provision and/or desludging of latrines is 0.12%, and the levy for the inspection of fire extinguishers is 0.20%.

Based on the classification analysis, increasing tax and levy revenues in the short term will focus on the developed and developing sectors and the developed and depressed sectors. But if you want to run long-term, the focus is on developing and developing potential. The Pangkalpinang City Government needs to adopt the RAJADO (Replication, Authority, Innovation Network, Budget, and Digitalization/

Online) approach to increase Regional Revenue (Naibaho, 2021) especially on innovation (Ferza et al., 2019). Innovation can be in the form of using digital money for tax and levy payments to minimize leakage. Research result (Yunita et al., 2021) shows that the people of Pangkalpinang City are familiar with and highly intend to use electronic money as payment. In addition, the government also needs to increase investment in the form of public facilities and services to support economic growth (Cicellia & Sunaryo, 2015; Reniati et al., 2020). To achieve sustainable development, the Pangkalpinang City Government needs to implement strategies in regulation, funding, socialization, and collaboration (Ivanov et al., 2016; Nurfindarti, 2019). The Pangkalpinang City Government is advised to increase investment in development that supports the economy and public services that will improve the community's economy (S. N. Wulandari & Afriyanni, 2021).

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