# Provincial Tax Map in Indonesia

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**Abstract.** With the enactment of law number 28 of 2009 concerning regional taxes and regional levies, the provincial government in Indonesia starting in 2014 received an additional source of income in the form of cigarette taxes. This study aims to tax the provincial tax by measuring how much the region contributes to regional original income and regional income as well as from the type of regional tax that is the source of provincial regional tax revenue in Indonesia. Using data for three years from 2017 to 2019, that the average provincial tax found across Indonesia on local revenue generated is 81.99 percent, and local revenue is 29.65 percent. In three years on average, provincial regional taxes in Indonesia come from motor vehicle taxes of 30.17 percent, motor vehicle transfer taxes of 25.77 percent, motor vehicle fuel taxes of 23.47 percent, surface water taxes of 1.20 percent and cigarette tax 16.57 percent.

Keywords: Local Tax, Local Revenue, Regional Income

### 1 Introduction

The increase in the financial capacity of the province by measuring independence as measured by comparing the original regional income with the total regional income is thought to be due to additional provincial revenues in the form of cigarette taxes that took effect in 2014. On average, the independence of the provinces in Indonesia in 2013 was around 35 percent and in 2014 and 2015 to around 40 percent [1]. With the additional types of local taxes in the form of cigarette taxes, provincial financial performance will be better because dependence on certain types of local taxes will be reduced. motorized vehicles, transfer fees for motorized vehicles, and motor vehicle fuel taxes [2].

The implementation of broader government functions by local governments needs to be supported by adequate funding sources. It is realized that the sources of income from one region to another are very diverse. There are several regions that have a fairly high regional financial capacity, but there are also several regions that have very minimal regional financial capabilities. The enactment of the new Law on Regional Taxes and Regional Levies will certainly affect regional income, especially Regional Original Revenue. Especially for the provincial government in the new regional tax and levy law, additional sources of income are given in the form of cigarette taxes. The existence of a new source of revenue in the form of taxes will change the map of local tax revenues.

This study aims to map the provincial tax revenue in Indonesia and how much it contributes to local revenue. In addition, this study also aims to map where the sources of provincial tax revenues come from. This mapping is important to be able to find out which provinces have large, medium or low tax revenues and the types of local taxes that contribute to provincial local tax revenues. With this mapping, it can be seen the contribution of each

type of provincial tax to local tax revenues. So from this mapping it can be seen how big the contribution of motor vehicle tax, motor vehicle transfer fees, motor vehicle material tax, surface water tax, cigarette tax on local taxes can be seen.

## 2 Method

The population in this study all provinces in Indonesia amounted to 34 provinces. The data used is secondary data published by the Central Statistics Agency and the Directorate General of Balance, Ministry of Finance with observations for three years from 2017 to 2019 [3][4][5][6][7]. The analysis method uses a descriptive method.

#### 3 Results and Discussion

#### 3.1 Local Tax Growth

The average provincial tax revenue in Indonesia in 2017 was 3,744,684,162 thousand rupiah. There are 6 provinces whose tax revenues are higher than the average, namely: 1. Jakarta at 36,500,782,226 thousand rupiah; 2. West Java in the amount of 16,483,085,761 thousand rupiah; 3. East Java in the amount of 14,350,601,627 thousand rupiah; 4. Central Java in the amount of 10,572,698,333 thousand rupiah; 5. Banten Rp 5,487,328,744 thousand and 6. North Sumatra Rp 4,823,549,139 thousand. In 2018, the average provincial tax revenue was 4,038,758,501 thousand rupiah. This year there are 7 provinces whose tax revenues exceed the average, namely: 1. Jakarta amounting to Rp 37,538,912,327 thousand; 2. West Java in the amount of 18,153,166,035 thousand rupiah; East Java in the amount of 15,060,713,325 thousand rupiah; Central Java in the amount of 11,507,119,643 thousand rupiah; 5. Banten amounting to 6,219,324,543 thousand rupiah; 6. North Sumatra in the amount of 5,219,324,543 thousand rupiah; 7. East Kalimantan amounted to 4,716,694,877 thousand rupiah. In 2019, the average provincial tax revenue was 4,290,287,514 thousand rupiah. There are 7 provinces whose tax revenues are higher than the average, namely: 1. Jakarta amounting to Rp 40,298,122,505 thousand rupiah; 2. West Java, amounting to 19,626,352,312 thousand rupiah; 3. East Java in the amount of 15,522,201,423 thousand rupiah; 4. Central Java in the amount of 11,951,919,535 thousand rupiah; 5. Banten amounting to 6,720,753,612 thousand rupiah; 6. North Sumatra in the amount of 5,058,433,945 thousand rupiah; 7. East Kalimantan amounted to 4,984,520,517 thousand rupiah. The amount of local tax revenue certainly cannot be separated from the role of the cigarette tax which came into effect in 2014.

Jakarta as the nation's capital city always has the highest tax revenue because the taxes received are not only from provincial taxes but also from district/city tax revenues. Of the provinces whose tax revenues are above average, the majority are in Java, which consists of 5 provinces, Sumatra 1 province, and Kalimantan 1 province. This shows that there are disparities between regions in Indonesia and Java is the center of economic growth. The provincial governments with the lowest tax revenues in three years were the following provinces: Malulu, North Maluku, West Papua, West Sulawesi and North Kalimantan.

On average, the growth of provincial tax revenues in Indonesia in 2018 was 10.93 percent. The five provinces with the highest growth in local tax revenues were East Kalimantan,

34.55%; North Kalimantan 26.81%; Central Kalimantan 24.09%; Bangka Belitung 25.13% and West Kalimantan 15.59%. The province whose tax revenue decreased in 2018 compared to 2017 was Aceh, which fell 0.48%. In 2019 the growth of provincial regional tax revenues grew by an average of 8.49%. The province with the highest growth in local tax revenues was Papua, which grew by 89.59%, while the province with the lowest growth in local taxes was Bengkulu, which decreased by 8.38%.

**Table 1.** Provincial Tax Revenue 2017 – 2019 (in thousands of rupiah)

	Table 1. I Tovinciai	Tax Revenue 2017 -	2019 (III tilousalius 01 1	upiaii)
No	Provinsi	2017	2018	2019
1	Aceh	1.315.393.895	1.309.081.813	1.409.251.915
2	Sumatera Utara	4.823.549.139	5.219.324.543	5.058.443.945
3	Sumatera Barat	1.626.923.373	1.797.677.159	1.872.933.991
4	Riau	2.755.328.120	3.075.986.228	2.989.749.791
5	Jambi	1.316.162.468	1.374.289.410	1.651.089.944
6	Sumatera Selatan	2.835.440.187	3.197.900.645	3.224.422.159
7	Bengkulu	597.694.185	679.443.636	622.484.622
8	Lampung	2.451.408.220	2.577.739.718	2.627.888.230
9	Bangka Belitung	629.136.457	787.235.420	760.997.424
10	Kepulauan Riau	980.678.290	1.099.144.852	1.182.117.353
11	DKI Jakarta	36.500.782.266	37.538.912.327	40.298.122.505
12	Jawa Barat	16.483.085.761	18.153.616.035	19.626.352.312
13	Jawa Tengah	10.572.698.333	11.507.119.643	11.951.919.535
14	D.I Yogyakarta	1.583.875.064	1.717.291.718	1.773.940.605
15	Jawa Timur	14.350.601.627	15.060.713.325	15.522.201.423
16	Banten	5.487.328.744	6.032.622.560	6.720.753.612
17	Bali	2.872.354.213	3.230.732.170	3.463.996.394
18	Nusa Tenggara Barat	1.180.802.224	1.269.688.670	1.404.964.803
19	Nusa Tenggara Timur	814.122.727	866.157.780	908.207.118
20	Kalimantan Barat	1.660.417.093	1.919.257.811	1.959.341.747
21	Kalimantan Tengah	1.091.749.859	1.354.700.324	1.438.977.523
23	Kalimantan Timur	3.505.578.072	4.716.694.877	4.984.520.517
24	Kalimantan Utara	306.285.119	388.388.763	417.536.962
25	Sulawesi Utara	983.887.128	1.052.296.155	1.050.089.445
26	Sulawesi Tengah	790.439.058	835.456.979	896.321.262
27	Sulawesi Selatan	3.241.746.521	3.462.184.657	3.710.611.600
28	Sulawesi Tenggara	614.004.323	688.866.498	864.165.451
29	Gorontalo	309.671.370	350.425.924	387.400.917
30	Sulawesi Barat	259.868.471	272.232.843	291.493.654
31	Maluku	329.090.435	363.950.503	361.093.162
32	Maluku Utara	241.190.368	267.741.502	322.556.643
33	Papua Barat	306.595.595	344.238.713	369.671.612
34	Papua	756.688.630	767.917.342	1.455.869.770
	Rata-rata	3.744.684.162	4.038.758.501	4.290.287.514

(Central Bureau of Statistics reprocessed)

### 3.2 Contribution of Regional Taxes to Regional Original Income

The contribution of local taxes to local revenue can show the role of local taxes on local revenues to local taxes in a province. The greater the contribution of local taxes to local original income indicates a greater role, whereas if the contribution of local taxes to local original income is low, it indicates the low role of local taxes to the formation of regional original income in a province.

In 2017, the contribution of local taxes to local revenue in Indonesia was an average of 81.30 percent. The magnitude of this contribution certainly shows how big the role of provincial taxes is to local revenue in Indonesia. The contribution of local taxes to local revenue is highest at 95.33 percent in Banten Province, while the lowest is in Aceh Province with a contribution of 57.79 percent. In 2018 the contribution of local taxes to local revenue in Indonesia was an average of 83.15 percent with the largest contribution in Banten Province and the lowest in Aceh Province. In 2019, the highest contribution of local taxes to local original income remained in Banten Province and the lowest in Aceh Province with an average contribution of local taxes to regional original income in Indonesia of 81.41 percent. The high contribution of taxes to local revenue shows how big the role of local taxes is compared to other sources of income, namely regional levies, local company revenues, and other legitimate local revenue.

Table 2. Local Tax Contribution To Regional Original Revenue

No	Provinsi	2017	2018	2019
1	Aceh	57,79%	55,48%	52,22%
2	Sumatera Utara	91,23%	92,56%	87,80%
3	Sumatera Barat	76,24%	79,02%	80,44%
4	Riau	82,00%	84,53%	84,02%
5	Jambi	83,27%	82,96%	100,00%
6	Sumatera Selatan	93,53%	90,64%	92,47%
7	Bengkulu	74,29%	77,89%	75,30%
8	Lampung	89,12%	90,00%	87,07%
9	Bangka Belitung	88,63%	92,57%	92,05%
10	Kepulauan Riau	89,58%	90,05%	91,01%
11	DKI Jakarta	83,14%	86,64%	88,17%
12	Jawa Barat	91,16%	92,42%	92,38%
13	Jawa Tengah	84,26%	83,92%	82,78%
14	D.I Yogyakarta	85,52%	84,14%	85,17%
15	Jawa Timur	82,84%	81,27%	80,31%
16	Banten	95,33%	95,32%	95,71%
17	Bali	84,52%	86,88%	86,10%
18	Nusa Tenggara Barat	70,10%	76,47%	77,73%
19	Nusa Tenggara Timur	77,72%	79,08%	72,14%
20	Kalimantan Barat	85,34%	87,44%	85,14%
21	Kalimantan Tengah	81,33%	83,80%	81,01%
23	Kalimantan Timur	76,40%	81,32%	76,03%
24	Kalimantan Utara	63,45%	67,65%	63,66%
25	Sulawesi Utara	85,80%	83,93%	81,66%
26	Sulawesi Tengah	82,49%	82,18%	82,17%

27	Sulawesi Selatan	88,11%	87,69%	89,66%
28	Sulawesi Tenggara	76,16%	76,21%	76,58%
29	Gorontalo	88,92%	91,15%	89,38%
30	Sulawesi Barat	87,52%	90,29%	84,44%
31	Maluku	76,38%	78,14%	74,79%
32	Maluku Utara	73,65%	74,72%	74,42%
33	Papua Barat	65,64%	74,96%	76,42%
34	Papua	74,49%	83,06%	48,27%
	Rata-rata	81,39%	83,16%	81,41%

(Central Bureau of Statistics reprocessed)

### 3.3 Contribution of Regional Taxes to Regional Income

The contribution of local taxes to local revenues shows how much the role of local taxes contributes to the total provincial income. Provincial income consists of regional income which includes local taxes, balancing funds or transfer funds from the central government, and financing. The contribution of provincial taxes to provincial income in Indonesia in 2017 was on average 28.69 percent with the highest contribution in DKI Jakarta at 56.31 percent and the lowest in West Papua at 4.35 percent. In 2018, the average contribution of local taxes to regional income was 30.09 percent and the lowest was in West Papua and the highest in Jakarta. In 2019, the contribution of local taxes to provincial revenues in Indonesia averaged 30.15 percent with the highest rate in Jakarta and the lowest in West Papua. There are three provinces that have the lowest contribution from local taxes to local revenue, namely West Papua, Papua, and Aceh. This is due to the very large amount of special autonomy funds in the three provinces so that the contribution of local taxes to local revenues is very small.

Table 3. Contribution of Regional Taxes to Regional Income

No	Provinsi	2017	2018	2019
1	Aceh	9,17%	9,07%	8,95%
2	Sumatera Utara	39,42%	41,09%	38,67%
3	Sumatera Barat	26,82%	28,57%	29,31%
4	Riau	34,87%	36,28%	34,35%
5	Jambi	30,57%	31,15%	36,10%
6	Sumatera Selatan	34,60%	34,98%	34,77%
7	Bengkulu	21,31%	23,83%	21,22%
8	Lampung	35,98%	36,31%	36,16%
9	Bangka Belitung	27,95%	30,79%	28,25%
10	Kepulauan Riau	30,15%	31,41%	30,11%
11	DKI Jakarta	56,31%	61,30%	64,68%
12	Jawa Barat	51,25%	53,52%	54,46%
13	Jawa Tengah	44,60%	46,58%	46,22%
14	D.I Yogyakarta	31,15%	31,61%	31,13%
15	Jawa Timur	48,05%	47,15%	46,40%
16	Banten	56,54%	58,45%	60,00%
17	Bali	47,94%	51,61%	52,13%
18	Nusa Tenggara Barat	23,23%	25,70%	27,03%
19	Nusa Tenggara Timur	17,32%	18,12%	16,96%

20	Kalimantan Barat	30,81%	33,91%	32,99%
21	Kalimantan Tengah	26,62%	28,93%	28,84%
23	Kalimantan Timur	42,99%	44,21%	42,33%
24	Kalimantan Utara	13,77%	16,04%	16,00%
25	Sulawesi Utara	26,36%	27,84%	26,65%
26	Sulawesi Tengah	21,73%	21,53%	21,71%
27	Sulawesi Selatan	35,80%	37,42%	38,76%
28	Sulawesi Tenggara	17,37%	18,20%	20,74%
29	Gorontalo	17,47%	19,47%	19,96%
30	Sulawesi Barat	14,19%	14,97%	14,33%
31	Maluku	11,68%	11,84%	11,61%
32	Maluku Utara	10,60%	10,76%	12,00%
33	Papua Barat	4,35%	4,71%	3,26%
34	Papua	5,82%	5,75%	8,98%
	Rata-rata	28,69%	30,09%	30,15%

(Central Bureau of Statistics reprocessed)

## 3.4 Local Taxes by Type

Provincial regional taxes in Indonesia based on law number 28 of 2019 concerning regional taxes and regional levies consist of: motor vehicle taxes, transfer fees for motorized vehicles, motor vehicle fuel taxes, surface water taxes, and cigarette taxes. local taxes by type and amount of local tax contributions. Motor vehicle taxes received by the provincial government during 2017 to 2019 showed an increase from year to year. This increase in motor vehicle tax revenue is certainly caused by an increase in the number of motorized vehicles owned by both individuals and companies in one province. The average motor vehicle tax revenue in 2017 per province in Indonesia was Rp. 1,222,815,812,224 rupiah with the highest value of Rp. 8,005,898,498,574 rupiah in Jakarta and the lowest of Rp. 40,498,752,601 rupiah in North Maluku. In 2018 the average motor vehicle tax revenue was 1,312,548,761,692 rupiah with the highest value in Jakarta at 8,553,632,204,643 rupiah and the lowest at 43,345,969,897 rupiah in North Maluku. In 2019, the average motor vehicle tax revenue was 1,416,345,618,055 rupiah with the highest achievement in DKI Jakarta at 8,844,155,231,721 rupiah and the lowest in West Sulawesi at 67,190,997,328 rupiah. After Jakarta, the ones receiving the highest motor vehicle tax for three consecutive years are West Java, East Java, and Central Java. This is in accordance with the population of motorized vehicles with the largest number in DKI Jakarta, West Java, East Java, and Central Java. The average contribution of motor vehicle tax to local taxes in 2017 was 29.28%, in 2018 it was 30.17% and in 2019 it was 31.08%.

The receipt of transfer fees for motorized vehicles is related to the transfer of ownership rights to motorized vehicles, both used and used and so on. The amount of the transfer fee for motorized vehicles depends on the level of transactions for buying and selling motorized vehicles, both new and used, that occur within the province. Motor vehicle levies for three consecutive years from 2017 to 2019 averaged 914,007,664,072 rupiah in 2017 with the highest 5,092,551,608,700 rupiah in West Java and the lowest 52,019,491,503 rupiah in North Maluku. In 2018 the transfer fee for motorized vehicles was an average of 5,517,989,187,700 rupiah in West Java and the lowest was 55,924,886,763 rupiah in North Maluku. In 2019, the highest transfer fee for motorized vehicles was 6,300,781,441,900 rupiah in West Java and the lowest was 62,985,010,509 rupiah in North Maluku. The contribution of motor vehicle

transfer fees to provincial local taxes in Indonesia was an average of 24.84% in 2017, 26.53% in 2018, and 25.94% in 2019.

Motor vehicle fuel tax is imposed on the purchase of fuel used for motor vehicles. In 2017 the average was 550,187,738 rupiah with the highest value of 2,314,028,808,428 rupiah in East Java and the lowest in West Sulawesi of 52,952,484,129. In 2018 and 2019 the highest motor vehicle fuel tax revenues were in East Java and the lowest in West Sulawesi. In 2018 the average motor vehicle fuel tax was 621,851,554,806 rupiah, the highest value was 2,772,013,489,541 rupiah and the lowest was 59,779,136,548 rupiah. In 2019, the average was 641,450,209,932 rupiah, with the highest value of 2,799,415,975,548 rupiah and the lowest value of 62,822,566,816 rupiah. The contribution of motor vehicle fuel tax to provincial local taxes was an average of 22.21% in 2017, 24.41% in 2018, and 23.79% in 2019.

The average surface water tax revenue in 2017 was IDR 31,252,181,489 with the highest value of IDR 582,734,593,614 rupiah. In 2018 the average surface water tax was Rp. 24,924,939.992 with the highest value of Rp. 320,456,276,475 rupiah in Central Kalimantan. In 2019, the highest surface water tax in Papua was 665,179,656,772 rupiah with an average value of 33,377,612,861 rupiah. The contribution of surface water tax to provincial local taxes on average in 2017, 2018, and 2019 was 0.51%, 1.17%, 1.92%.

The cigarette tax which came into effect in 2014 has also provided a source of high provincial tax revenue so that it can improve the financial capacity of the provincial government in financing government activities in improving people's welfare. In 2017, the average cigarette tax received by the provincial government in Indonesia was 503,096,132,970 rupiah with the highest value of 2,612,928,878,795 rupiah in East Java. In 2018 the average cigarette tax was 437,632,350,929 rupiah with the highest value of 2,519,085,324,712 rupiah in West Java. In 2019, the average cigarette tax was 422,296,650,710 rupiah with the highest value in West Java of 2,479,468,228,309 rupiah. The average contribution of cigarette taxes to local taxes was 18.43% in 2017, 16.44% in 2018 and 14.85% in 2019. The contribution of cigarette taxes to local revenues from 2017 to 2019 was 14.76%, 13.52% and 11.88%.

With the cigarette tax, provincial regional tax performance is healthier because dependence on certain types of local taxes is reduced. Fais and Surraya (2016) found that cigarette taxes have no significant effect on local tax revenues in the province of the Special Region of Yogyakarta. Pangayow [8] found the role of cigarette taxes is quite high where cigarette taxes contribute about 19 percent of local taxes in North Sulawesi province.

### 4 Conclusion

- a) On average, provincial tax revenues in Indonesia from 2017 to 2019 have increased. Since the source of local tax revenue is influenced by the population and motorized vehicles, provinces with high population and motorized vehicles have high local taxes, while provinces with low population and motorized vehicles have low local tax revenues.
- b) The contribution of local taxes to local revenue in Indonesia is very high, as indicated by the average contribution of local taxes to local revenue above 80%.
- c) The contribution of local taxes to provincial revenues in Indonesia is quite high with an average of around 30%.
- d) The types of local taxes that contribute the highest to the lowest to local taxes are first: motor vehicle tax, second: motor vehicle transfer fees, third: motor vehicle fuel tax, fourth: cigarette tax, and finally surface water tax.

### References

- [1] Maryono, "Map Of Financial Capabilities Of The Provincial Region Indonesia," *Econ. Bus. Manag. Res.*, vol. 86, 2018.
- [2] Maryono and I. Nurhayati, "Regional Finance and Tax Capability of Central Java Province," Proc. Unisbank Multi-Discipline Natl. Semin., 2016.
- [3] C. S. Agency, Provincial Government Financial Statistics in Indonesia 2017 2020. 2020.
- [4] "The Directorate General of Sea Transportation of the Ministry of Transportation," 2019.
- [5] D. G. of F. Balance, "Ministry of Finance of the Republic of Indonesia, Realization of APBD per Type of Tax 2019," 2019.
- [6] D. G. of F. Balance, "Ministry of Finance of the Republic of Indonesia, Realization of APBD per Type of Tax 2018," 2018.
- [7] D. G. of F. Balance, "Ministry of Finance of the Republic of Indonesia, Realization of APBD per Type of Tax 2017," 2017.
- [8] B. Pangayow, "Contribution and Effectiveness of Cigarette Taxes on Regional Original Income (PAD) of North Sulawesi Province 2014-2016," *J. Manag. Bus.*, vol. 3, no. 1, 2018.